

MEDICAL EDUCATION RESEARCH and INNOVATION CONFERENCE

December 8, 2020
PROGRAM BOOKLET

Keynote Speakers



Anna T. Cianciolo, Ph.D.

*Associate Professor of
Medical Education,
Southern Illinois University
School of Medicine
Editor-in-Chief, Teaching and
Learning in Medicine*



Holly Gooding, M.D., M.Sc.

*Associate Professor of Pediatrics,
Emory University School of Medicine
Co-Director, Harvard Macy Program for
Educators in the Health Professions*



WAYNE STATE
School of Medicine

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Wayne State is one of only a few public urban universities with the Carnegie Foundation's highest rankings in both research and community engagement.

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OVERVIEW

The Wayne State University School of Medicine (WSUSOM) will host its 2nd annual Medical Education Research and Innovation (MERI) Conference to showcase completed and in-progress medical education research and innovation projects conducted by students, residents, staff and faculty Dec. 8, 2020.

More than 100 posters and oral presentations were submitted for the much anticipated virtual conference, believed to be the first of its kind nationally. Geared toward first-time research participants, topics are related to timely and important topics relevant within a medical education setting and to the broader educational community. Rewards and recognition will be given for best-in-class presentations.

The school's MERI conference will feature two keynote speakers:

Anna T. Cianciolo, Ph.D.

Associate Professor of Medical Education
Southern Illinois University School of Medicine
Editor-in-Chief, Teaching and Learning in Medicine
Presentation Title: *The Editorial Process from Soup to Nuts*

Holly Gooding, M.D., M.Sc.

Associate Professor of Pediatrics
Emory University School of Medicine
Co-Director, Harvard Macy Program for Educators in the Health Professions
Presentation Title: *The Science of Learning and its Application to Health Professions Education*

CONFERENCE GOALS

1. Acknowledge current curricular innovations that take place at Wayne State University School of Medicine by providing participants a venue to showcase their work.
2. Help individuals take their works in progress to completed projects or innovations.
3. Help individuals take their research from the local stage to the national stage.
4. Help individuals translate their posters/oral abstracts to publications.





AGENDA

2 p.m. **CONFERENCE OPENING**
 Mark E. Schweitzer, M.D., Dean, Wayne State University School of Medicine
 Richard S. Baker, M.D., Vice Dean of Medical Education

2:30 p.m. **PLENARY 1 (35 MIN + 15 MIN Q & A)**
 Facilitator:
 Senthil Rajasekaran, M.D., Senior Associate Dean of Undergraduate Medical Education

Speaker:
 Holly Gooding, M.D., Associate Professor of Pediatrics, Emory University School of Medicine
The Science of Learning and its Application to Health Professions Education

3:30 p.m. **ORAL PRESENTATIONS (BREAKOUT SESSIONS)**
 Facilitator:
 Diane Levine, M.D., Professor - Clinical, Internal Medicine

4:30 p.m. **PLENARY 2 (35 MIN + 15 MIN Q & A)**
 Facilitator:
 Jason Booza, Ph.D., Assistant Dean of Compliance and Continuous Quality Improvement

Speaker:
 Anna Cianciolo, Ph.D.
The Editorial Process from Soup to Nuts

5:30 p.m. **AWARDS CEREMONY**
 Facilitators:
 Robert Reaves, M.B.A., Director of Accreditation
 Jenna Carter, Graduate Research Assistant, Cancer Biology

6 p.m. **AFTERGLOW WITH SPEAKERS**





BREAKOUT SESSIONS

3:00 p.m. ORAL PRESENTATIONS

Facilitator: Alyssa Goodwin

DIVERSITY AND INCLUSION

Facilitator: Alyssa Goodwin

Indication for Asking for Gender Pronouns in Healthcare Settings

Talal Alsheqaih, Julie Novak Ph.D.

Factors Affecting Career Advancement for Women in Academic Medicine at Wayne State University School of Medicine

Johnathon Collins, M.D.; Yang Liu, M.D.; Marissa Matthews, M.D.; Anne Messman, M.D.

Women in Neurosurgery: Seminars for Medical Students as a Pilot Intervention

Jacob Gluski, Dorothy Yim, Neena I. Marupudi

Increasing Diversity in Cardiology: A Fellowship Director's Perspective

Arif Musa, MS, Amman Bhasin, B.S., Azar Razikeen, B.S., Louis Massoud, B.S., Arshia Noori, M.D., Ali Ghandour, B.S., David Gelovani, M.D., Ajay S Vaidya, M.D.

GRADUATE MEDICAL EDUCATION – TEACHING AND INSTRUCTION

Facilitator: Miriam Dash

A Video-Based Training Program Can Effectively Teach the Deroofing Technique for the Treatment of Hidradenitis Suppurativa to Emergency Department Residents

Meredith Hengy, B.S.; Steven Daveluy, M.D.

Moving the Didactic Needle: The Conversion to Engaging Synchronous and Asynchronous Remote Learning

Mara M. Hoffert, Ph.D., Anastasia Mortimore, EdS

A Pilot Curriculum and Creation of New Competency Assessment Tools for the Mastery of Chest Computed Tomography (CT) Scan Interpretation for a Pulmonary Critical Care Medicine (PCCM) Fellowship

Abdelaziz Mohamed, M.D., Divya Venkat, M.D., Chetna Jinjuvadia, M.D., Ayman Soubani, M.D., Sarah Lee, M.D., Abdulghani Sankari, M.D.

“Stronger but not faster”: Flipped classroom teaching significantly improves resident’s skills but not speed

Chinmayee Potti, M.D.; Joshua Eby, M.D.; Ali Rteil, M.D.; Ann Woodward, M.D.; Martina Draxler, M.D.; Alexander Shepard, M.D.; Loay S. Kabbani, M.D.

THE OPIOID CRISIS

Facilitator: Erika Roberts

The Impact of Medical Student Specialty Preference on Opioid Overdose Knowledge and Attitudes Towards Patients with Opioid Use Disorder

Sabrina E Dass, Tabitha E Moses, Kelsey Gockman, Anirudh Chitale, Eva Waineo, Mark K Greenwald

Positive Regard Towards Patients with Substance Use Disorders: Associations with Confidence in Opioid Overdose Response and Attitudes Towards Naloxone Distribution

Kara Klomprens, Tabitha Moses, Kaycee Ching, Paige Baal, Eva Waineo, Mark K. Greenwald

Evaluating the Unique Impact of Opioid Overdose Prevention and Response Training on Medical Student Knowledge and Attitudes toward Opioid Overdose

Tabitha E. Moses, Jessica Moreno, Rafael Ramos, Eva Waineo, Mark K. Greenwald

UNDERGRADUATE MEDICAL EDUCATION – CLINICAL EDUCATION

Facilitator: Tapinder Singh

Improving Peer Education of History Taking in the Clinical Skills Curriculum of Pre-Clinical Undergraduate Medical Education at WSUSOM

Victoria Badia

continued...



Closed-ended method for clinical history taking in foreign languages
Omar Mahmood, Jawad Bouhamdan, Ala Addin Sid Ahmed

Instructional Scaffolding of Clinical Reasoning Development in an M1 Clinical Skills Course
Sonal C. Patel, Erin Miller

Virtual Case Studies Series: Development of Clinical Skills and Patient Population Understanding
Marla Rojas Thaireaux, B.A.; Paige Baal, B.S.; Janki Vaghasia, MPH; Robert Sherwin, M.D.

UNDERGRADUATE MEDICAL EDUCATION - MEDICAL EDUCATION IN THE COMMUNITY

Facilitator: Jenna Carter

Practicing Community Level Intervention to Promote the Health and Well-being of a Vulnerable Population During a Pandemic
Osama Alkhalili, Kiana Cabasa, Sikander Chohan, Carly Conway, David Huynh, Cassandra Keinath, Crisshara Allen, B.S., Jennifer Mendez, M.D.

The Development of Curriculum and an Assessment Tool to explore Social Accountability
Nakia V. Allen, M.D., Sonal C. Patel, M.A., Denise White-Perkins, M.D. Ph.D.

Healing Between the Lines: Centering community partnerships for structural racism education and health advocacy in medical education
Cedrick Mutebi, Taylor Barrow, Capricia Bell, Selena Rodriguez Rivera, M.D., Ijeoma Nnodim Opara, M.D., FAAP

The Effective Inclusion of Caring for Incarcerated Patients into the Wayne School of Medicine Curriculum
Nicole Sukkarieh





KEYNOTE SPEAKERS

Anna T. Cianciolo, Ph.D.

Associate Professor of Medical Education
Southern Illinois University School of Medicine
Editor-in-Chief, Teaching and Learning in Medicine

PRESENTATION TITLE:

The Editorial Process from Soup to Nuts

BIOGRAPHY:

I am an Associate Professor of Medical Education at Southern Illinois University School of Medicine and Editor in Chief of Teaching and Learning in Medicine. I come to medical education with Ph.D. training in engineering psychology (2001 – Georgia Institute of Technology), 12 years' experience conducting performance-based training research and development for the U.S. Army, and a lifelong passion for understanding the nature of expertise and its development. I work at an institution that is internationally recognized for educational innovation, where the curriculum offers a rich, "living laboratory" for studying the social and technological aspects of medical education collaboratively with faculty and students. My role as Editor also allows me special observability on the development of scholarly expertise, particularly the cultivation of individual voice and advancement of community understanding. My research interests include small-group collaborative and peer-assisted learning, clinical teaching, learning, and assessment, clinical reasoning, and scholarly professional development. My work has been funded by the Society of Directors of Research in Medical Education (SDRME), the Harvard Macy Foundation, and the National Institutes of Health (NIH). It has been published in *Academic Medicine*, *Medical Education*, and *Advances in Health Sciences Education*, among other journals. I served two terms as the Central Region Group on Educational Affairs (CGEA) Chair of the Medical Education Scholarship, Research, and Evaluation (MESRE) Section. I have been recognized by my school as Outstanding Scholar (2016) and Outstanding Educator (2018) and by the Association for Medical Education in Europe (AMEE) as a Miriam Friedman Ben-David New Educator (2014). Ultimately, my professional goal is to improve medical education by doing work that encourages and empowers medical educators to practice reflectively and, in so doing, make their world a better place for themselves, their learners, and their patients.



Holly Gooding, M.D., M.Sc.

Associate Professor of Pediatrics
Emory University School of Medicine
Co-Director, Harvard Macy Program for Educators
in the Health Professions

PRESENTATION TITLE:

The Science of Learning and its Application to Health Professions Education

BIOGRAPHY:

Dr. Gooding is an adolescent medicine specialist in the Division of General Pediatrics & Adolescent Medicine at Emory University School of Medicine. Dr. Gooding received her B.S. from the University of Georgia, her M.Sc. from the University of California Berkeley School of Public Health, and her M.D. from the University of California San Francisco. She completed her clinical fellowships in internal and adolescent medicine at Brigham and Women's and Boston Children's Hospital and was on the faculty at Harvard Medical School for eight years, serving as faculty advisor to medical education student projects and co-chairing the HMS Wellness and Mental Health Task Force. She relocated to Emory University in 2019 to be Section Head for Adolescent Medicine, and she remains Co-Director for the Harvard Macy Program for Educators in the Health Professions. Dr. Gooding is the recipient of several research grants from the NIH and various Foundations to study cardiovascular health promotion among adolescents and evidence-based teaching practices among faculty and practicing physicians.





CONFERENCE COMMITTEE

MEDICAL EDUCATION RESEARCH AND INNOVATION CONFERENCE COMMITTEE SPONSORS:

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Jenna Carter
Graduate Research Assistant
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KEYNOTE SPEAKERS:

Anna T. Cianciolo, Ph.D.
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Alyssa Goodwin
Miriam Dash
Tapinder Singh
Jenna Carter

RESEARCH

“Medical Education Research” refers to research related to the learning process that occurs within a medical education setting. Topics include but are not limited to learner characteristics, optimizing the learning process, assessment and evaluation, professional development, instruction design, technology in the learning environment, wellbeing. Research at any level (undergraduate, graduate, practitioner, faculty) of medical education are welcome. Medical education research can also include quality improvement projects.

Increasing Diversity in Cardiology: A Fellowship Director’s Perspective

TYPE: Oral Presentation

CATEGORY: Research

AUTHORS: Arif Musa, M.S., Amman Bhasin, B.S., Azar Razikeen, B.S., Louis Massoud, B.S., Arshia Noori, M.D., Ali Ghandour, B.S., David Gelovani, M.D., Ajay S Vaidya, M.D.

BACKGROUND:

Under-represented minority (URM) physicians, specifically African American, Asian (Filipino, Hmong, Vietnamese), Native American, Hispanic, and/or Pacific Islander, constitute only about 10% of practicing cardiologists. Diversity in cardiology is essential to serve a growing number of minority patients, starting with recruitment within cardiology programs. The goal of this survey is to ask current cardiology fellowship program directors regarding their views of diversity and recruitment of URM.

METHODS:

A questionnaire was developed to assess program characteristics, importance of diversity, URM presence, methods and responsibility to increase diversity among U.S. accredited cardiology fellowship programs. Cardiology programs were grouped based on region (Coastal, Midwest, or South), category (community, university, or hybrid), location (rural, suburban, urban), fellowship years, fellow positions, and URM percentage. The survey will be sent to cardiology program directors listed on the FREIDA AMA Residency & Fellowship Database.

RESULTS:

Current data collection is ongoing. The questionnaire has been sent out to cardiology fellowship program directors this past week. Preliminary results are available and we hope that complete or near complete results will be available at the time of the conference. We look forward to sharing the results we collect over the next several weeks during this conference.

CONCLUSION:

This study may identify methods to increase URM diversity in cardiology fellowships that offer insight to medical students and resident physicians considering cardiology fellowships. These findings may also inform cardiology program directors of which methods are most supported by their peers and which additional initiatives may be implemented.



A Video-Based Training Program Can Effectively Teach the Deroofing Technique for the Treatment of Hidradenitis Suppurativa to Emergency Department Residents

TYPE: Oral Presentation

CATEGORY: Research

AUTHORS: Meredith Hengy, B.S.; Steven Daveluy, M.D.

BACKGROUND:

Hidradenitis Suppurativa (HS) is a chronic inflammatory skin disease that commonly forms in intertriginous zones. The cause is multifactorial. HS can be significantly debilitating and often goes undiagnosed for many years. Treatment typically consists of intralesional corticosteroid injections, oral antibiotics, immunomodulatory therapy, laser treatments, incision and drainage, deroofing, and surgical excision. Despite having multiple treatment options, the recurrence of HS lesions is very high. Current research has found the use of the deroofing procedure for HS lesions to be an effective treatment with a low recurrence rate, few complications, and high patient satisfaction. The simple nature of this procedure also allows it to be easily adapted into the ED. Despite this knowledge, incision and drainage is almost always performed for HS patients in the ED.

METHODS:

This project aims to implement the deroofing procedure at Detroit Receiving Hospital ED in Detroit, Michigan. The goal is to utilize a brief video to provide ED residents training in the deroofing procedure and then perform a program evaluation to examine the success of the video. The training video was recorded using the materials that are available in the ED for the deroofing procedure. This video will be available to be viewed by physicians and residents. An assessment tool was created for attending physicians to evaluate the success of ED residents in performing the deroofing procedure. In addition, other ED residents may evaluate each other.

RESULTS:

The results of the assessment tool will be analyzed using a Likert scale based statistical analysis. A long-term goal is to make the training video widely available to facilitate the implementation of the deroofing procedure in more EDs in order to provide the highest quality care to patients that suffer from HS.

CONCLUSION:

None.



Do Depression symptoms impact Depression Stigma in Medical Students?

TYPE: Poster

CATEGORY: Research

AUTHORS: Arif Musa, M.S., Jesse B Swantek, B.S., Kasim Pendi, B.S., David A Baron, MEd, D.O., Grant LeVasseur, B.S., Sophia Neuenfeldt, B.S., Eva Waimeo, M.D., Ali Khambati, B.S., Yousif Jajo, B.S., Elizabeth Warbasse, B.A., Jenna Yousif, B.S., El Caney Arnold IV, B.S., David Safani, M.D.,

BACKGROUND:

Despite the alarming prevalence of depression among American medical students, multiple barriers exist in students' help-seeking behavior. The stigma associated with depression is categorized as personal or perceived, both of which may obstruct students from reaching out for treatment. Quantification of stigma in relation to depression remains sparse in scientific literature. Consequently, a cross-sectional study of medical students attending a public institution was performed to examine the relationship between depression severity and stigma.

METHODS:

An anonymous, electronic questionnaire with a socio-demographic section, Patient Health Questionnaire (PHQ-9), and Depression Stigma Scale (DSS) was disseminated to all enrolled medical students (n=1200). Responses were analyzed using IBM SPSS Version 26. Predictors of depression severity and personal and perceived stigma were determined by performing a two-tailed t-test with unequal variances where a p-value < 0.05 indicated statistical significance.

RESULTS:

Data is currently in the process of collection. From respondents thus far (n=178), 11% met criteria for a provisional diagnosis of major depressive disorder and 13% met criteria for other depressive disorder. Individuals who identified as non-heterosexual (p<0.05) or as second-year medical students (p<0.05) exhibited higher depression severity than their counterparts. Respondents who were not comfortable seeking treatment (p<0.05) or have participated in pharmacotherapy coupled with therapy (p<0.05) also scored higher for depression severity. Males demonstrated more personal (p<0.001) and perceived (p<0.001) stigmatized beliefs compared to females. Perceived stigma was highest for those who have participated in therapy or counseling (p<0.05). Perceived stigma was significantly greater than personal stigma among medical students (p<0.001).

CONCLUSION:

These preliminary findings are consistent with previous reports of depression prevalence among medical students and suggest unique predictors that medical school services can target to effectively combat depression, increase support, and promote treatment-seeking behavior among students.





Improving Medical Student Knowledge Concerning Opioid Use in Metro Detroit

TYPE: Poster

CATEGORY: Research

AUTHORS: Ala Addin Sid Ahmed, Shabber Syed , Abdulmohsen Ghuloum, Lana Abdole

BACKGROUND:

Dearborn is home to a growing opioid epidemic that is still relatively hidden from the public's view. The community in Dearborn face unique challenges with respect to the opioid epidemic, such as a deeply rooted perception of taboo around opioid use, owing to the fact that it is composed of a large Muslim population. In an effort to increase awareness about this problem, and to enhance the knowledge base of medical students concerning opioid abuse, the Islamic Medical Student Association (IMSA) at WSUSOM created a seminar around opioid misuse and treatment of substance use disorders (SUDs).

METHODS:

IMSA held a seminar featuring Dr. Edmond Okotcha, a physician working in the heart of the Dearborn opioid epidemic. A pre-survey was administered to determine student knowledge on the opioid crisis in Metro Detroit and general statements on cultural literacy. Students then worked on two cases related to opioid overdose and treatment. Following the seminar, a post-survey was given to all attendees.

RESULTS:

Information will be analyzed concerning the pre and post-surveys using the Qualtrics survey system software. The goal is to use the data to identify gaps in knowledge and cultural literacy among students in addition to improving future seminars. The anticipated impact of these results is that the data would help to better inform the knowledge base of students concerning the opioid epidemic, cultural literacy, and knowledge about opioids that are crucial to combat the opioid crisis in minority communities. By raising awareness among medical students, we can improve future healthcare for those communities with SUDs.

CONCLUSION:

This medical education module was used to identify medical student attitudes and knowledge towards the opioid crisis affecting local communities. We hope to make this a recurrent seminar at WSUSOM and eventually part of the curriculum as part of population health.



Factors Affecting Career Advancement for Women in Academic Medicine at Wayne State University School of Medicine

TYPE: Oral Presentation

CATEGORY: Research

AUTHORS: Johnathon Collins, M.D.; Yang Liu, M.D.; Marissa Matthews, M.D.; Anne Messman, M.D.

BACKGROUND:

Within medicine, there is a recognized disparity between male and female gender with regard to academic success. Female full professors tend to be significantly outnumbered by their male counterparts at many academic medical institutions. This study seeks to assess personal features, institutional resources and barriers contributing to academic success among academic females at the Wayne State University School of Medicine (WSUSOM), with academic success measured as achievement of the rank of associate or full professor as a non-voluntary faculty member.

METHODS:

The study will be a voluntary, anonymous, uncompensated survey study of non-voluntary faculty at the level of associate or full professor at the WSUSOM. Surveys will be sent electronically to the subject's WSUSOM email address. Participants will provide demographic data and indicate how various factors contributed to their aforementioned success.

RESULTS:

CONCLUSION:

We hope to identify which professional and personal characteristics female faculty cite as being helpful or a hindrance to their academic promotion. We will also perform subgroup analyses based on the personal demographics provided by the survey respondents including which academic department they work in, whether they hold advanced degrees beyond an M.D. or D.O., whether they completed fellowship training, and years to achieve promotion to assess for any differences within these groups.

A particularly challenging aspect of this study was deciding how to appropriately define academic success in this population. Ultimately, we decided that appointment as associate or full professor reflected substantial contributions to their institution and the discipline of medicine as a whole and should serve as a reliable indicator of successful academic career advancement. Given the under-representation of females at this level of academia, those who were able to attain such a status are an elite minority we hope to closely examine with hopes of identifying trends that support a faculty member's academic success.





The Impact of Medical Student Specialty Preference on Opioid Overdose Knowledge and Attitudes Towards Patients with Opioid Use Disorder

TYPE: Oral Presentation

CATEGORY: Research

AUTHORS: Sabrina E Dass, Tabitha E Moses, Kelsey Gockman, Anirudh Chitale, Eva Waineo, Mark K Greenwald

BACKGROUND:

Physicians are often ill-equipped to treat patients with substance use disorders (SUDs) and their negative attitudes can affect care. Although all physicians encounter patients with SUDs, some specialties may have greater exposure. This study assesses the impact of medical students' specialty choice on opioid overdose knowledge and attitudes towards patients with SUDs.

METHODS:

First-year medical students completed a survey about clinical experiences, opioid overdose, and attitudes towards patients with opioid use disorder (OUD) before and after receiving opioid overdose prevention and response training (OOPRT). Students indicated their top specialty, categorized into 4 groups (primary care, medicine, surgery, unsure). One-way ANOVA with t-tests for significant results was used to analyze outcomes by specialty choice.

RESULTS:

Intended specialty (n=266, 28.9% primary care, 18.8% medicine, 39.1% surgery, 13.2% unsure) impacted overdose knowledge and attitudes. Students unsure about their specialty knew more about overdose risk factors than those interested in medicine (8.46 ± 1.17 vs. 7.40 ± 1.78 ; $t=3.295$ $p=0.001$). Students who chose surgery felt more ready to intervene in an overdose than those who chose medicine (4.33 ± 0.43 vs. 4.08 ± 0.59 ; $t=2.996$ $p=0.003$). Students interested in primary care were more likely to agree with, I enjoy giving extra time to patients with SUDs than those interested in medicine ($t=2.794$ $p=0.006$). OOPRT effectiveness did not significantly differ by specialty group.

CONCLUSION:

Specialty groups differed in attitudes towards patients with OUD and opioid overdose knowledge. Although there was no impact of specialty choice on training, further investigation into differences between medicine and surgery would be of interest. As medical schools continue to educate on SUD management, future physicians, regardless of specialty, may be better equipped to care for and reduce stigma towards patients with SUDs.

Women in Neurosurgery: Seminars for Medical Students as a Pilot Intervention

TYPE: Oral Presentation

CATEGORY: Research

AUTHORS: Jacob Gluski, Dorothy Yim, Neena I. Marupudi

BACKGROUND:

Surgical specialties struggle to recruit and retain women. Many professional societies that represent these specialties are seeking to make institutional changes to encourage more women to enter their fields. Oftentimes, these efforts have taken shape as studies to identify factors which contribute to gender inequality. Commonly cited factors include inflexible work environments, unconscious bias, harassment, and lack of mentorship.

METHODS:

Due to their familiarity with the field, the authors chose to focus on gender inequality within neurosurgery. Structural changes within society and medicine have made many neurosurgical residency programs more flexible than in the past. However, medical students still view the field as being distinctly inflexible. The authors formed the hypothesis that neurosurgery was, in part, suffering from a perception issue. A seminar was designed with two objectives: to inform medical students about changes in the field regarding its family friendliness and to introduce them to a female neurosurgery attending who could serve as a potential future mentor.

The authors evaluated beliefs about neurosurgery held by the students using a pre/post survey design. The students were asked to respond on a scale from 0 to 5 to quantify perceived difficulties to enter neurosurgery as well as increased difficulties women might face.

RESULTS:

14 Students completed both surveys: 10 females and 4 males. The one-hour seminar significantly reduced the mean perceived difficulty to enter neurosurgery from 4.4 to 4.1 (Kruskal Wallis Test $P=0.014$); additionally, the mean perceived additional difficulty for career advancement faced by women in neurosurgery decreased from 3.6 to 2.8 (Kruskal Wallis Test $P=0.026$).

CONCLUSION:

Given that statistically significant results were seen, even with such a small group of students, the authors would recommend further studies be undertaken to evaluate the long-term effectiveness of mentorship-seminars as a low-cost intervention to address gender inequality in surgical fields.



The Medical Student Check-In Survey to Assess Student Wellness: What Our Students Say and What WSUSOM Can Do

TYPE: Poster

CATEGORY: Research

AUTHORS: Eva Waineo M.D., R. Brent Stansfield Ph.D., Jason Booza, Ph.D., Hannah Kopinsky, Margit Chadwell M.D., Tsveti Markova M.D.

BACKGROUND:

Studies of North American medical students show a higher prevalence of anxiety and depression than age-matched peers. Burnout impacts clinical practice and empathy. These studies demonstrate the need to understand wellbeing influences from the start of training. We describe the recently validated Medical Student Check-in Survey (MSCIS) to better understand these important influences. Our aim is to share findings as they relate to informed changes specific to WSUSOM which positively impact our students' wellbeing.

METHODS:

Medical students and faculty collaborated on development of MSCIS, a novel form derived after review of literature, designed to measure frequencies of behaviors and thoughts indicative of student wellbeing using neutral/positive language. The MSCIS was sent to the entire medical school student body with over a 90% response rate. Data from completed surveys was analyzed and missing data was imputed using listwise means.

RESULTS:

Five factors of student wellness are measured by the MSCIS, with mean scores of each medical school year. Personal Confidence (3.24, 3.49, 3.4, 3.44), Hedonic Well-Being which measures happiness and basic needs (3.44, 3.56, 3.39, 3.86), and Knew Who to Call in Case of Emergency (3.56, 3.70, 3.01, and 3.28) change across medical school years. Social Support (3.72, 3.74, 3.85, 3.83) and Euodaimonic Well-Being which measures meaningful work & institutional support (3.19, 3.21, 3.24, 3.31) stay constant.

CONCLUSION:

Students' sense of wellbeing is influenced by multiple factors. Although the process is complex we are able to measure certain impactful influences. New interventions in 2020 include Early Alert text messaging, MyMDtoBe emails about medical school life to students and their support givers, mental health first aid training, interventions focused on housing and food security, and increased access to mental health treatment. Providing this survey annually will lead to ability to measure change across the same cohort and inform medical student leadership of future effective interventions.

Continuous, Peer-Led Curriculum Feedback During Curriculum Revision: An Opportunity for More Timely and Actionable Feedback

TYPE: Poster

CATEGORY: Research

AUTHORS: Alexander Swantek, Sevan Misirliyan, Cooper Laurain, Michael Franklin

BACKGROUND:

In response to the changing educational landscape, the rate of curricula reform has been increasing in medical schools across the nation. Despite many medical schools modifying, or completely redesigning their curricula, best practices for revision are still not well understood.

Purpose: Demonstrate a peer-led student feedback tool as an effective means for continuous curriculum quality improvement during a curriculum overhaul, and beyond.

METHODS:

An online curriculum feedback tool was created and tracked by students over a period of 3 years encompassing a preclinical curriculum revision at a single institution to elicit feedback from students throughout each year. Descriptive statistical analysis was performed.

RESULTS:

Class A had 61 responses (M1=13, M2=48) during the final years of the legacy curriculum. Class B had 252 responses (M1=177, M2=75) as the first class in the new curriculum. Class C had 226 responses through half of their M2 year (M1=107, M2=119). Average time between responses was 9.67, 3.20, and 2.09 days for each class, respectively. However, significant clustering of responses was seen with 282 (79%) of all responses (n=358) less than 2 days from the most recent previous post and only 43 (12%) of responses were at a week or more.

CONCLUSION:

Compared to students in the legacy curriculum, students in the redesigned curriculum engaged in peer led feedback more frequently. This shows a student led, continuous feedback tool can elicit high quality and volume responses to augment more traditional feedback tools. Significant clustering of responses at the beginning and end of courses or blocks shows gaps in feedback and opportunities for intervention. Therefore, it is important to have continuously available avenues for students to provide meaningful feedback, monitored by similarly invested students. Engagement with feedback tools should not rely on exam dates, course completion, or other traditional feedback points, but instead be continuously available and monitored.



Positive Regard Towards Patients with Substance Use Disorders: Associations with Confidence in Opioid Overdose Response and Attitudes Towards Naloxone Distribution

TYPE: Oral Presentation

CATEGORY: Research

AUTHORS: Kara Klomprens, Tabitha Moses, Kaycee Ching, Paige Baal, Eva Waineo, Mark K. Greenwald

BACKGROUND:

The opioid crisis is a major public health issue in the United States; in 2018, an estimated 128 people died every day from opioid overdose. There has been research on medical student attitudes in relation to the opioid crisis but knowledge gaps exist. Our goal was to study how the attitudes of first-year medical students towards substance use disorders (SUD) impacts their beliefs regarding naloxone treatment.

METHODS:

All first-year medical students at WSUSOM were asked to complete a baseline survey including the Medical Conditions Regard Scale for SUDs (MCRS), Naloxone Related Risk Compensation Beliefs (NaRRC-B), Opioid Overdose Attitude Scale (OOAS) and the Opioid Overdose Knowledge Scale (OOKS). We used Spearman's Rho correlations to explore relationships between the total MCRS score and other outcome measures.

RESULTS:

Among participating students (n=250), there were significant positive correlations between the MCRS score and OOAS concerns and readiness scales ($r=.226, p<.01$ and $r=.359, p<.01$); students with positive attitudes towards SUDs (i.e. higher MCRS scores) were more confident in their ability to respond to opioid overdose. Additionally, students with higher MCRS scores were more likely to disagree with all five NaRRC-B statements regarding potential consequences of naloxone access including: 1) increased opioids/heroin use ($r=-2.62, p<.01$), 2) decreased likelihood of seeking treatment ($r=-.245, p<.01$), 3) potential overuse ($r=-.380, p<.01$), and 4) enables drug users ($r=-.315, p<.01$).

CONCLUSION:

Students with positive attitudes towards SUD reported increased readiness and fewer concerns about responding to an opioid overdose as well as more positive attitudes towards naloxone use and distribution. These findings highlight the need for medical education that aims to improve student attitudes towards SUDs, and therefore towards future opioid overdose management and harm reduction.

“Stronger but not faster”: Flipped classroom teaching significantly improves resident’s skills but not speed

TYPE: Oral Presentation

CATEGORY: Research

AUTHORS: Chinmayee Potti, M.D.; Joshua Eby, M.D.; Ali Rteil, M.D.; Ann Woodward, M.D.; Martina Draxler, M.D.; Alexander Shepard, M.D.; Loay S. Kabbani, M.D.

BACKGROUND:

Flipped classroom teaching is a non-traditional education model where instructional content is delivered outside the classroom. Our objective was to study the difference in time taken, and quality of PTFE (Polytetrafluoroethylene) patch graft anastomosis performed by residents with and without flipped teaching.

METHODS:

The study was set in a skills simulation teaching session overseen by attending surgeons. The intervention consisted of introducing a video outlining the technical aspects, watched before the session. The first group (2018 PGY 1 and 2) was given instructions at the time of the class without a prior educational video or resources. The second group (2019, 2020 PGY 1 and 2) was asked to watch a 20 minute video on the technical aspects of the procedure prior to the class. Participants then performed a standardized patch repair of PTFE graft. The groups were timed. The quality of the anastomosis was tested by assessing the number of leaks, and the quantity of leak from the patch. Bivariate analysis sample t-tests were used for statistical analysis. P value $<.05$ was considered significant.

RESULTS:

Forty-two residents (PGY 1 and 2) were enrolled in the study, 15 in non-intervention group-1, 27 in intervention group-2, compared to 7 staff surgeons. Mean completion time was 26 minutes (group 1) vs 27 minutes (group 2), $p=0.6$. Staff completion time was 12 minutes, $p=0.001$. Number of major leaks (not needle holes) was 2.0 (group 1) vs 1.6 (group 2), $p=0.007$, none for staff. Total quantity of leak was 42mL (group 1) vs 15 mL (group 2), $p=0.0001$.

CONCLUSION:

A structured educational intervention - watching a video of a procedure before the skills session did not change the time needed to complete the skill. There was improvement in the technical outcome defined by a decrease in the total leak quantity. Flipped teaching significantly improves resident’s skill, not speed.



The Impact of the COVID-19 Pandemic on Laryngology Fellowships: A National Survey of Fellowship Program Directors

TYPE: Poster

CATEGORY: Research

AUTHORS: Ricardo Engel, B.S.; James Stathakios, B.S.; Michael Chung, M.D.; Jared Johnson, M.D.; Jeffrey Hotaling, M.D.

BACKGROUND:

To highlight the impact of the COVID-19 pandemic on laryngology fellowship programs, and how programs have adapted to the crisis.

METHODS:

An anonymous survey was sent to fellowship directors of the 26 laryngology fellowship programs. Using a scale from no impact to significant impact, fellowship directors were asked several questions regarding changes to fellowship education, training, and interviewing in the context of the COVID-19 pandemic. They were also asked about changes to didactics and the involvement of telehealth and other virtual technologies in their programs

RESULTS:

16 (62%) of 26 fellowship directors responded to the survey. Time spent performing day-to-day fellowship activities has been most affected, followed by clinical and surgical aspects of the fellows' education. A majority of programs (81%) were still performing surgical cases as of April 23, 2020, and only 3/16 (19%) programs reported fellows being pulled from fellowship duties to participate in COVID-19 care teams. Academic-focused time has increased in the wake of the pandemic, and a majority of programs have added research, self-study, and/or online lectures to substitute for lost clinical and surgical experiences. Half of the programs have fellows participating in telehealth. While 9/16 (56%) programs noted an impact on the interview process, only 2/16 (13%) programs expected delays with the start of their new fellows in July 2020.

CONCLUSION:

The impact of the COVID-19 pandemic on laryngology fellowship programs is most significant in the time spent performing day-to-day fellowship activities, followed by clinical and surgical aspects of fellows' education. Fellowship programs have had more time to focus on academic aspects of training, especially through online didactic courses and research. Virtual technologies have been helpful, such as telehealth and online didactics. Time will tell how these changes affect undergraduate and graduate medical education as a whole.

Evaluating the Unique Impact of Opioid Overdose Prevention and Response Training on Medical Student Knowledge and Attitudes toward Opioid Overdose

TYPE: Oral Presentation

CATEGORY: Research

AUTHORS: Tabitha E. Moses, Jessica Moreno, Rafael Ramos, Eva Waineo, Mark K. Greenwald

BACKGROUND:

As opioid overdose remains a leading cause of accidental death in the USA, medical schools have begun incorporating harm reduction training into curricula. Initial data suggest these trainings improve student knowledge; however, it is unclear whether these changes persist over time and whether training provides added value beyond the traditional curriculum. This project examines the long-term impact of Opioid Overdose Prevention and Response Training (OOPRT) at WSU-SOM and evaluates whether students who received training (vs. those who did not) had greater improvements in knowledge and attitudes.

METHODS:

Incoming students in the Class of 2023 were surveyed on opioid overdose knowledge, attitudes, and experiences. 50% of students were randomly assigned to receive a 1-hour OOPRT during the first month; the other 50% were a no-training control. All students completed a 1-year follow-up survey. We used RM ANOVA to compare 1-year change in knowledge and attitudes between groups.

RESULTS:

Data were included from students who completed the baseline and 1-year follow-up (N=167), 49.7% (n=83) received OOPRT. Results revealed a significant effect of training on 2 of 4 opioid overdose knowledge domains: overdose signs ($F(1,165)=4.374$, $p=0.038$, partial $\eta^2=0.026$) and naloxone use ($F(1,165)=9.222$, $p=0.003$, partial $\eta^2=0.053$) and 2 of 3 opioid overdose attitude domains: competencies ($F(1,165)=26.419$, $p<0.001$, partial $\eta^2=0.138$) and concerns about managing an overdose ($F(1,165)=9.977$, $p=0.002$, partial $\eta^2=0.057$).

CONCLUSION:

These data show OOPRT effects (1) can be maintained without more structured educational intervention and (2) are unique to the training and not attained through the regular curriculum. This study provides the first evidence to suggest OOPRT may have unique, long-lasting effects on knowledge of and attitudes towards opioid overdose.



Impact of an Online Social Platform on Medical Student Wellness and Perceptions of Communication

TYPE: Poster

CATEGORY: Research

AUTHORS: Ala Addin Sid Ahmed, James MacKenzie, Chaitanya Dandu, Andrew Lange, Diane Levine M.D., Eva Waineo, M.D.

BACKGROUND:

Medical schools have been developing ways to combat the feelings of isolation in students that can lead to burnout and depression as a much-needed priority. The COVID19 pandemic has resulted in the acceleration of the already existing trend of online/distance learning with a significant reduction of in-person interactions, both in the medical school environment and in other aspects of students' lives. Physical distancing and distance learning may increase feelings of isolation and loneliness. Social networking platforms may present a means to improve perceptions of engagement and social support, thus improving wellness among medical students. Discord is a messaging platform that allows users to use different communication channels, engage with other users through audio, video, emoticons, and to upload relevant files. The Wayne State University School of Medicine (WSUSOM) Discord server was started in the hopes of improving organization and efficiency of intra and inter class communication at the SOM. This study aims to explore the impact utilization of the online communication platform Discord has on student perceptions of wellness and engagement.

METHODS:

An anonymous Qualtrics survey will be sent to all first- and second-year medical students via both email and Discord. The survey is in the process of being developed and includes questions focused on reasons for use, comparison to other virtual platforms, ease of communication, and impact on aspects of isolation and wellness. The survey will not contain any identifying information.

RESULTS:

Data will be analyzed through the use of the Qualtrics Survey software system.

CONCLUSION:

Data from this research will help to facilitate a better understanding of ways to promote wellness through online interactions. This in turn may inspire innovation with respect to communication and engagement amongst medical students through new platforms, positively impacting the medical school learning environment.



Medical Student Perspectives on the Reporting of Mistreatment by Patients

TYPE: Poster

CATEGORY: Research

AUTHORS: Dariah Lauer, Emma Drenth, Nichole Tuite, Ria Minawala, Akanksha Vaishnav, Besma Aly, Eva Waineo, M.D., Jason Booza, Ph.D.

BACKGROUND:

Mistreatment of medical students by faculty, residents, and hospital staff often goes unreported, as students commonly feel these incidents are not important enough to report^{1,2}. This may be a result of the longstanding culture of resilience and deference in medicine and the frequent acceptance of mistreatment as part of medical training^{1,2,3,4}. The extent to which students are mistreated by patients is even lesser known, as this data is not currently collected. This study examines medical students' experiences with and attitudes regarding the reporting of mistreatment by patients.

METHODS:

Our survey investigating medical student mistreatment by patients, excluding behavior attributed to neuropsychiatric symptoms, was administered to all students enrolled at Wayne State University School of Medicine (WSUSOM) in April 2020, with a completion rate of 50.7% (n=582). It inquired about students' habits and attitudes regarding the reporting of these incidents and their satisfaction with the outcome if reported.

RESULTS:

Of students who experienced mistreatment by patients, 94.8% did not report the incident. The most commonly cited reasons for not reporting included not feeling the incident was important enough (36.1%), not thinking anything would be done about it (21.6%), and not knowing what to do (12.7%). 86.5% of respondents were aware of WSUSOM policies regarding the mistreatment of medical students, but only 61.7% said they felt comfortable with their knowledge of these policies.

CONCLUSION:

This shows a disconnect between students' awareness of mistreatment reporting policies and their understanding of how to apply them. This underreporting creates a knowledge gap around this issue which may be related to the prevalent attitude that these incidents are not important enough to report. Expanding policy awareness and curricular changes which aim to increase reporting of these incidents and improve medical students' experiences would need to include a shift in the widespread perception that patient harassment is to be accepted.





National Census for Standardized Patient Demographics in Medical Education

TYPE: Poster

CATEGORY: Research

AUTHORS: Evan Zeddies, Laura Hirshfield Ph.D.

BACKGROUND:

Introduction: Growing evidence suggests that patients from minoritized demographic backgrounds experience lower quality of care when compared to patients from majority demographic backgrounds, even after accounting for well-established confounding variables such as socioeconomic status and access to healthcare. One potential reason for this substandard care is that medical trainees lack adequate exposure to opportunities to learn about and interact with patients from marginalized communities in controlled settings. A key avenue for such interactions might include learning opportunities with a diverse population of Standardized Patients (SP's). Virtually all medical schools utilize SP interactions to help students develop interpersonal and clinical skills. The opportunity to encounter patients from various backgrounds in this environment may provide an effective mechanism of improving cultural and structural competency; in other words, learning from a diverse SP population may help students to more effectively work with patients from a variety of backgrounds. However, little is known about the demographics of the standardized patient population, or about whether SP programs seek to increase the diversity of their SPs.

METHODS:

A survey inquiring about the demographics, diversity, and barriers to diversifying the standardized patient population was sent to coordinators of all accredited M.D. medical school simulation centers.

RESULTS:

Preliminary results show mixed findings, with some minority populations appearing to be better represented than others. Overall, Hispanic, disabled, and LGBTQI populations appear to be the most underrepresented. Institutions reported a variety of barriers to increasing SP population diversity.

CONCLUSION:

Conclusions: Promoting diverse SP demographics has been identified by many as a key objective. However, programs often struggle to achieve this goal for a variety of reasons. Frequently cited challenges include low interest in becoming SPs and poorly qualified applications from minority group members.



Mind the Gap: Mapping Holes In Communication at Wayne State School of Medicine

TYPE: Poster

CATEGORY: Research

AUTHORS: Rebecca White, Lacy Brim, Simone K. Brennan, Julie M. Novak

BACKGROUND:

The purpose of this study was to map and examine WSU SOM's communication system and processes from medical students' perspective. Study findings identified strengths, weaknesses, gaps, and opportunities for productive change. This particular abstract focuses on the communication gaps.

METHODS:

This study used a qualitative methodology with descriptive data to illuminate how medical students experience and navigate the WSU SOM communication system. We developed an interview guide to explore the nuances of students' experiences. Students were prompted to reflect on how they experience the complex communication system within the WSU SOM. Student co-investigators conducted analyses of questionnaire data using Excel and Atlas.ti 8.0 analytical software. We also engaged in a triangulation process, which means that themes are based on data from more than one dataset.

RESULTS:

After reviewing student feedback, the following perceived gaps were identified: (1) lack of coordination/organization, (2) ambiguous point-persons, (3) lack of student involvement, (4) lack of centralization (5) lack of consistency and (6) mental health bridges. The most concerning of the six was the perceived lack of coordination/organization between communication sources. Words students selected as best descriptors for WSU SOM's organizational communication included disorganized as the most frequent (44/804 descriptors). Closely related descriptors (disarray, disconnected, disjointed, disordered, uncoordinated, and unorganized as well as contradictory and conflicting), were supported by 10% (81/804) of all descriptors.

CONCLUSION:

Examples provided by students suggest the apparent lack of communication among faculty/administrators/staff prior to communicating with the student body. Consequences include confusion and misinformation among the student body. Further, students express concerns about how the lack of communication affects curricular organization and the communication culture and climate in the WSU SOM. Results suggest that full or partial resolution of the communication gap would increase school cohesiveness and decrease unnecessary stress placed on students.





Prevalence of Mistreatment of Medical Students by Patients: The Difference Gender Makes

TYPE: Poster

CATEGORY: Research

AUTHORS: Akanksha Vaishnav, Emma Drenth, Nichole Tuite, Ria Minawala, Besma Aly, Dariah Lauer, Eva Waineo, M.D., Jason Booza Ph.D.

BACKGROUND:

It has been widely documented that medical students are subjected to mistreatment by faculty, residents, and staff directly involved in their clinical education. A recent study that analyzed Graduation Questionnaire (GQ) survey data demonstrated female students report mistreatment and discrimination based on gender at higher rates than male students. However, most published studies exclusively focus on faculty as perpetrators. This study investigates the prevalence of student mistreatment by patients, with an emphasis on gender differences.

METHODS:

A voluntary and anonymous Qualtrics survey, modeled from the Behaviors Experienced During Medical School section of the Association of American Medical Colleges (AAMC) GQ, was made available to all medical students currently enrolled at Wayne State University School of Medicine between April and June of 2020 with a primary focus of investigating the prevalence of mistreatment behaviors exhibited by patients toward medical students. A total of 582 students (50.7%) completed the survey.

RESULTS:

58.1% of female and 41.7% of male medical students reported general mistreatment from patients. However, there were significant gender discrepancies in the prevalence of mistreatment regarding sexually related behaviors. Female medical students reported being subject to unwanted sexual advances (33.9%) and offensive sexist remarks (34.3%) at higher rates than their male colleagues (5.3%) and (7.8%) respectively. The majority of mistreatment occurred at clinical sites and service learning events. Other forms of mistreatment, such as public humiliation, physical harm, and discrimination based on race or sexual orientation, were comparable between genders.

CONCLUSION:

While a significant portion of all medical students report mistreatment by patients during their medical education, female students are disproportionately affected by unwanted sexual advances and sexist remarks. The alarming rates at which sexually related mistreatment events occur is concerning and requires further attention due to their potential to cause psychological distress to the students experiencing them and adversely impact their medical training.

The Affects of Medical Student Mistreatment by Patients

TYPE: Poster

CATEGORY: Research

AUTHORS: Nichole Tuite, Emma Drenth, Besma Aly, Dariah Lauer, Akanksha Vaishnav, Ria Minawala, Eva Waineo M.D., Jason Booza, Ph.D.

BACKGROUND:

Medical students experience mistreatment by faculty, residents, and other individuals directly involved in their clinical education. These experiences are known to adversely impact students both personally and professionally. Very few studies have specifically investigated the prevalence of mistreatment towards medical students by patients and fewer have explored the impact of these experiences. This study aims to assess what impact medical student mistreatment by patients has on the mistreated individual and on patient care.

METHODS:

This study analyzed data from an anonymous Qualtrics survey that was made available to currently enrolled medical students at WSUSOM between April-June of 2020. The survey investigated prevalence of mistreatment by patients. Student attitudes regarding these incidents were assessed.

RESULTS:

A total of 483 student surveys were collected. Samples included: 134 M1 (27.7%), 127 M2 (26.3%), 110 M3 (22.8%), and 112 M4 students (23.2%). 207 were male (42.9%), 275 were female (57.1%).

The survey evaluated mistreatment behaviors perpetrated by only patients. Results showed medical students experienced mistreatment from patients significantly more so than from non-patient individuals. Mistreatment experience(s) negatively affected students in terms of: self-esteem (22.9%), mental health (18.7%), feelings of burnout (12.4%), and wellbeing (8.3%). Students reported that the experience(s) caused them to feel: disrespected (12.0%), embarrassed (8.7%), angry (7.6%), belittled (7.41%), anxious (6.9%), discouraged (6.0%), and unconfident (5.5%).

Students reported that their mistreatment experience(s) negatively affected their: relationship or interactions with patient(s) (25.2%), confidence to perform clinical responsibilities (13.8%), ability to provide quality care to the patient(s) (11.4%), and ability to provide quality care to patients (4.2%).

CONCLUSION:

Few studies attempt to identify the prevalence of medical student mistreatment by patients and the consequences these experiences have on mistreated individuals and patient care. This study identifies a gap in the literature and provides preliminary data on the topic that may guide future interventions to support students.



The Role of Race/Ethnicity on Knowledge of and Attitudes Towards Opioid Overdose and Harm Reduction

TYPE: Poster

CATEGORY: Research

AUTHORS: Shabber Syed, Tabitha E. Moses, Lauren Culver, Wassim El-Sayed, Eva Waineo, Mark K. Greenwald

BACKGROUND:

The opioid epidemic remains a major public health concern for individuals from all backgrounds. Research has shown perceptions and tolerance of substance use disorder (SUD) vary by racial communities. This study assesses whether race impacts first-year medical students' knowledge and attitudes toward opioid overdose and treatment.

METHODS:

First-year medical students entering WSUSOM completed a baseline survey on their knowledge and attitudes towards SUDs. Assessments included the Opioid Overdose Attitude Scale (OOAS), Opioid Overdose Knowledge Scale (OOKS), Medical Condition Regard Scale for SUDs (MCRS), and Naloxone Related Risk Compensation Beliefs (NaRRC-B). We used one-way ANOVA to analyze racial/ethnic group (White, Asian, Middle Eastern, Black/African American) differences in assessment scores.

RESULTS:

Of the 230 participants (46.0% White, 22.8% Asian, 13.2% Middle Eastern, 10.0% Black/African American) there were no demographic differences between racial/ethnic groups. For 3 NaRRC-B statements Black/African Americans were less likely to agree that: naloxone distribution condoned drug use ($F(3,229)=3.33, p=0.020$), naloxone use should have a limit ($F(3,229)=6.878; p<0.001$), or it is enabling ($F(3,229)=5.92, p=0.001$). On the OOKS and OOAS Whites exhibited more knowledge of overdose signs ($F(3,229)=7.85, p<0.001$) and naloxone use ($F(3,229)=5.38, p=0.001$), more self-confidence ($F(3,229)=8.59, p<0.001$) and fewer concerns responding to overdose ($F(3,229)=6.20, p<0.001$) than their Asian counterparts.

CONCLUSION:

Black students had more tolerant attitudes of naloxone use and distribution whereas White students had more baseline knowledge on opioid/naloxone use and comfort responding to overdose. Understanding these trends will help tailor medical education and train future physicians to combat this epidemic in an informed and empathic way.

Differences in Assessments of Residents' Communication Skills between Online and Face-to-Face Simulated Patient Encounters

TYPE: Poster

CATEGORY: Research

AUTHORS: R. Brent Stansfield, Heidi Kenaga, Tsveti Markova

BACKGROUND:

Residency training programs must measure clinical communication skills. The Kalamazoo Essential Elements of Clinical Communication (KEECC) offers a framework for valid assessment of face-to-face (FTF) clinical interactions but there is less understanding of communication in online, video-based telehealth settings. Typically, Wayne State University conducts a FTF communication skills objective structured clinical exercise (OSCE) using standardized patients (SP) but conducted a telehealth exercise in 2020 due to the COVID-19 epidemic.

METHODS:

The OSCE contained 4 cases per year (of 8 available cases). SPs rated residents and residents rated themselves using the 7-item KEECC-A. In 2020, residents completed two subscales of the Interpersonal Reactivity Index (IRI) and reported technical issues and video quality. We used multilevel mixed models and regression to test the effect of FTF vs. telehealth format, post-graduate year of training (PGY), rating source (SP or self), empathy scores, and reported technical difficulties on KEECC-A ratings.

RESULTS:

SP ratings from FTF encounters rose with resident PGY and correlated with resident empathy scores, but SP ratings from the telehealth format did not. Technical difficulties and video quality did not predict SP ratings. Analysis of individual KEECC-A items shows that residents' ability to build relationships and understand the patient's perspective were related to training year and empathy scores in the face-to-face format but not in the online format.

CONCLUSION:

Online, video-based telemedicine appears to require a different assessment framework than FTF patient encounters. Future research needs to elucidate these differences to better understand how to revise curricula to improve and assess residents' telehealth communication skills.



Reframing a Service-Learning Initiative to Improve Connections with Older Adults

TYPE: Poster

CATEGORY: Research

AUTHORS: Hannah L. Shuman B.S., Kenan Alhayek B.S., Leya T. Maliekal B.S., Sara L. Thomas B.S., Lucas S. Werner B.S., Latonya A. Riddle-Jones M.D., MPH, Jennifer Mendez Ph.D.

BACKGROUND:

At Wayne State University School of Medicine (WSUSOM), a Service Learning program is designed to encourage communication between students and older adults through the lens of falls prevention in assisted-living facilities of Detroit. The original goal of this program was to assess our patient's fall risk and suggest healthcare facility alterations that could improve health outcomes. Our group had the unique experience of being paired with a 62-year-old African-American female patient with cerebral palsy, providing us with the opportunity to evolve the original goal of the program and connect with our patient outside of her fall risk.

METHODS:

We (five medical students) individually interviewed our patient and a staff member at a single extended care facility over a five-month period between September 2019 - January 2020. Interviews were conducted at monthly intervals utilizing standardized surveys developed by the Centers for Disease Control and WSUSOM faculty. Surveys assessed various topics: biographical information, wheelchair usage, and falls history. Interviews also included a detailed history surrounding our patient's personal life, family history, hobbies, and daily life.

RESULTS:

Our plans include surveying the Class of 2023 and 2022 at WSUSOM to see if their experience with this program aligned with ours in order to make a better informed suggestion to our school. We aim to investigate whether our peers benefited more from assessing their patient's fall risk or from building a relationship with their older adult.

CONCLUSION:

The original goal of the program was to assess fall risk in assisted-living facilities. However, we felt that framing this project around its original goal of falls prevention moved the focus from the patient's personal life and experiences to completion of a task. Moving forward, we suggest evolving this program to focus more on the relationship with the older adult and less so on their fall risk.



Food Insecurity Education in Medical School: Experiential Learning with an Urban Farming Initiative

TYPE: Poster

CATEGORY: Research

AUTHORS: Samantha Rea, Jay Jarodiya M.D., MPH, Madeline Berschback M.D., Diane Levine M.D.

BACKGROUND:

Food insecurity is associated with numerous healthcare disparities and poor health outcomes, but it is not routinely addressed in medical education. The aim of this study was to address if participation in a hands-on urban farming volunteer program improved medical students' understanding of food security.

METHODS:

WSUSOM medical students who were active members of the Aesculapians Honor Society were recruited between August 2019 and May 2020. Members were required to volunteer a minimum of 12 hours with the Michigan Urban Farming Initiative (MUFI).

The Food Insecurity for Health Professionals (FISHP) survey was adapted into a 14-question survey to be administered prior to and following the completion of the required volunteering (Smith et al., 2017). Data was collected electronically with Qualtrics. Statistical analysis was performed using StataSE 16 software using univariate analyses, paired t-tests, and independent t-tests. Significance was determined at a p-value of 0.05.

RESULTS:

Medical students (n=18) were more likely to feel knowledgeable about food insecurity and its adverse effects on health after participation in MUFI (p=0.015). Participants also felt more comfortable referring patients to food resources that address food insecurity (p=0.005). The mean FISHP score on the pre-survey was 34.27, compared to 36.72 on the post-survey (p=0.035). An independent t-test demonstrated a statistically significant difference between the mean FISHP scores for the control group and the pre-MUFI group (p=0.001), and between the control group and the post-MUFI group (p<0.001).

CONCLUSION:

Medical students had improved comfort in discussing food insecurity with their patients after participating in the integrative volunteering program. Future directions include implementation of this program for all medical students, regardless of extracurricular involvement or specialty choice, as medical students can serve as a valuable resource to clinics, hospitals, and patients.





Medical Student-Designed Individual Career Plan: A Pilot Study

TYPE: Poster

CATEGORY: Research

AUTHORS: Alexander D Pietroski, M.S., B.S.; David V Tran, B.S.

BACKGROUND:

Our objective is to implement a second year medical student-facilitated intervention consisting of goal orientation tasks, to assist students in developing an individualized career trajectory plan. We hypothesize that the intervention will positively affect student self-efficacy, metacognitive self-regulation, test-anxiety, and longitudinally, residency preparedness.

METHODS:

Students will create an individualized career plan (ICP) which details goals, how they will achieve those goals, and a self-monitoring systems. Students will also be asked to complete a questionnaire before and after the intervention. Students will also participate in two online assignments and two zoom sessions where they create and develop their ICP. Lastly, we ask participating students an exit survey asking them to reflect on themes within their ICP as contextualized through the Graduate Questionnaire.

RESULTS:

The three questionnaires Modified Motivated Strategies for Learning Questionnaire (mMSLQ), Academic Motivation Scale (AMS), Strength of Motivation for Medical School-Revised (SSMSR) did not show any significant changes within seventeen second-year medical students at Wayne State University School of Medicine. There were significant improvements in likeliness to set goals ($p < 0.017$), self-directed learning ($p < 0.001$), willingness to sacrifice time ($p < 0.014$), likeliness to go into medicine despite debt ($p < 0.028$), and wanting a better salary ($p < 0.023$). Students rated the program with a Likert-scale, worthwhile 3.9/5.0, more prepared to achieve goals 3.9/5.0, integration into a first-year curriculum 4.4/5.0, recommend a program like this to other students 4.2/5.0.

CONCLUSION:

Based on our pilot study it appears that there was no significant impact on mMSLQ, AMS, and SSMSR. However, students found this program helpful and wished they would have experienced it earlier. Future program designs will feature a framework adapted from Entrustable Professional Activity, a large sample size, and longitudinal accountability.



Increasing Civic Engagement through the Creation of the Voting Is Healthcare (VIH) Taskforce

TYPE: Poster

CATEGORY: Research

AUTHORS: Jaya Parulekar, B.S., Kellie Brue M.S., Neel Patel, D.O., Ijeoma Nnodim Opara, M.D.

BACKGROUND:

This year has been marked by a historic national election and global pandemic that created challenges for physicians and medical students. A need to increase civic engagement in our national, state, and local elections comes at a critical time. Recognizing that an identifiable gap exists in voter turnout in Detroit, the VIH Taskforce was created at Wayne State University School of Medicine (WSUSOM) to engage students, residents, faculty, and patients about voter registration. The Taskforce received additional sponsorship from the Health Equity and Justice in Medicine program, Black Medical Association and American Medical Association at WSUSOM. The Taskforce also partnered with VotER, a non-profit, non-partisan organization dedicated to helping patients register to vote through a user-friendly and easily-accessible online platform.

METHODS:

The VIH Taskforce and VotER created a text-messaging system and QR codes linked to a web platform specific to WSUSOM (vot-er.org/wayne). The QR codes were placed on badge-backers disseminated for in-person patient encounters and as an image for tele-health visits. A training session open to all WSUSOM members was also held featuring guest speakers from VotER Leadership and community partners across Michigan.

RESULTS:

Per VotER records, we were able to help 84 patients vote, registering 34 to vote and helping 50 vote from home. We are still waiting on the total patients registered in the City of Detroit from VotER Leadership.

CONCLUSION:

The VIH Taskforce successfully increased civic engagement at WSUSOM, representing a collaboration between physicians and students in engaging with each other and the patients whom they serve. The Taskforce hopes to continue conversations about civic engagement after the election cycle, with plans to branch out to additional outside health systems and community partners in the future.





The Use of Third- Party Resources for Usml Step 1 Exam Advise

TYPE: Poster

CATEGORY: Research

AUTHORS: Kelley Park, B.A.; Tessa LeWitt, B.S.; Kurt Wendland, MPH; Jason Booza, Ph.D.

BACKGROUND:

Literature regarding the USMLE Step 1 is mostly dedicated to the efficacy of content resources, and not students' information seeking behaviors. As third-party vendors permeate the market, the question of where students get their information and the validity of these resources arises. Online anonymous platforms such as Reddit and Student Doctor Network (SDN) are commonly used, creating an unregulated flow of information outside of formal education. This study examines information-seeking behaviors and attitudes towards online forums.

METHODS:

A pilot survey tool was distributed to members of a large public medical school Class of 2021. Survey questions were revised based on pilot data and re-distributed to the Class of 2022 as an anonymous email survey three months after completing the USMLE Step 1.

RESULTS:

154 students completed the survey. 66% relied on peers, 30.7% on online forums, 6.5% on school-provided information. 30.9% valued personalization of information followed by it being evidence-based (23%). For Reddit/SDN, getting study advice and score prediction tools were valued while school-provided information was valued for being evidence-based and tailored to curriculum.

CONCLUSION:

The results point to the fact that most students do not heavily rely on university-provided advice, although it remains valued as evidence-based and tailored to curriculum. Increasingly, students turn to peers or anonymous online forums for score prediction tools and personalized advice. However, they should remain cautious as the anonymous nature allows for possible false information and unwanted stress from sharing scores. Medical school curricula can integrate some of the positives of online forums to cater more to student's needs in the future. As medical education climate changes, formal evidence-based strategies can adapt alongside it to regulate information sources.



Student Perceptions of Support in a Redesigned Pre-Clinical Curriculum

TYPE: Poster

CATEGORY: Research

AUTHORS: Mitchell Naveh, Noor Khan

BACKGROUND:

Wayne State University School of Medicine (WSUSOM) recently overhauled its pre-clinical medical education, with the class of 2022 being the first cohort of students to experience the redesign. Pre-clinical education was condensed to 18 months, and the organization of content is now systems-based, with specialized NBME exams as the primary means of assessment.

The transition into medical school and learning high volumes of information for exams is stressful enough as it is for medical students (Ludwig et al. 2015), but adding on a novel curriculum design can pose more challenges for students (Yengo-Kahn, Baker, and Lomis, 2017). Many medical schools have implemented curriculum change to better educate their students, but there is limited literature on the impact of those changes on student wellness and perceptions of support, and even less information from a school with a large student body, like WSUSOM.

This poster will discuss the results of a short Qualtrics survey completed by the first and second cohorts of medical students in the new curriculum at WSUSOM, and their perceptions of academic, administrative, and peer support.

METHODS:

Students of the classes of 2022 and 2023 were sent a voluntary Qualtrics survey concerning their perception of support with regards to the new 18 month curriculum.

RESULTS:

CONCLUSION:

Conclusions have yet to be formed from data analysis.





The Impact of Personal Experience with Substance Use Disorders on First-Year Medical Students' Knowledge and Attitudes Towards Opioid Use Disorders

TYPE: Poster

CATEGORY: Research

AUTHORS: Kristina Barrientos, Tabitha Moses M.S., Tara Gloystein, Eva Waineo, M.D., Mark K. Greenwald, Ph.D.

BACKGROUND:

In 2018, there were 46,802 opioid-associated overdose deaths in the US. To address the opioid epidemic, substance use education has been implemented at many medical schools. We examined how previous knowledge of individuals with substance use disorders (SUDs) impact attitudes and knowledge towards opioid use disorders.

METHODS:

At WSUSOM, 1st-year medical students (n=250) completed a baseline survey to examine past experiences with naloxone and opioid overdose, clinical experiences, knowledge and attitudes about opioid overdose and naloxone, and attitudes towards patients with SUDs. Students completed the Opioid Overdose Attitudes Scale (OOAS), Opioid Overdose Knowledge Scale (OOKS), and Medical Conditions Regard Scale (MCRS). Independent t-tests were used to compare results of key outcomes between students who knew someone with a SUD and those who did not.

RESULTS:

Among students who completed the survey, 42.8% (n=107) knew someone with a SUD or had one themselves. Individuals who knew someone with a SUD reported fewer negative attitudes towards individuals with SUDs on 7 of 11 MCRS subscales ($p < 0.05$). Also, those who knew someone with a SUD reported feeling more competent (2.54 ± 0.741 vs. 2.29 ± 0.724 ; $t = 2.670$, $p = 0.008$) and ready (4.44 ± 0.337 vs. 4.28 ± 0.412 ; $t = 3.273$, $p = 0.001$) to respond to an opioid overdose, and had fewer concerns about doing so (3.69 ± 0.454 vs. 3.50 ± 0.526 ; $t = 2.950$, $p = 0.003$).

CONCLUSION:

Physicians across all specialties will encounter patients with SUDs. Nearly half of the medical students reported knowing someone with a SUD or had one themselves. These individuals demonstrated more positive attitudes towards individuals with SUDs and more willingness to receive SUD training. These findings highlight the need for SUD curriculum that emphasizes and incorporates early exposure to individuals with SUDs.

Clerkship Readiness Among Third Year Medical Students

TYPE: Poster

CATEGORY: Research

AUTHORS: Samia Mazumder, Mia Ma, Christopher Guyer, Christopher Steffes

BACKGROUND:

The preclinical curriculum is foundational for preparing medical students for clerkships, residency training and ultimately, the rest of their career as a physician. Throughout the preclinical years, it is imperative to ensure that medical students are skilled at clinical reasoning, critical thinking and are competent in core clinical skills. Although there have been many approaches to develop a preclinical curriculum that best prepares medical students for clerkships, no approach has been proven to be superior to others. The primary aim of this project is to determine the effect of a new, systems-based pre-clerkship curriculum (Highways to Excellence) on the perception of clerkship readiness among third year medical students.

METHODS:

A 44 question survey was administered to the class of 2021 and the class of 2022 prior to the start of their third year clerkships. The class of 2021 did not participate in the new Highways to Excellence pre-clerkship curriculum, while the class of 2022 did. Out of the 44 questions, 39 questions were multiple choice while 5 questions were free response. The 39 multiple choice survey questions were developed using a modified Likert scale where students were able to rate their perceived competency in core clerkship skills including the ability to conduct a physical examination, interpret lab results, communicate with team members and professionalism.

RESULTS:

The survey responses between the class of 2021 and the class of 2022 were analyzed using the chi-squared test. The data is currently being analyzed and the results of this of this project are in progress.

CONCLUSION:

We expect to find that students who participated in the new Highways to Excellence pre-clerkship curriculum were better prepared for third year clerkships compared to students who did not participate in the new curriculum.



Third Year Medical and Pharmacy Students' Perceived Knowledge, Attitudes, and Concerns Related to the COVID-19 Pandemic.

TYPE: Poster

CATEGORY: Research

AUTHORS: Ahmid Al-Shawk, M.D., Hamsa Gabbara, M.D., Francine Dina Salinitri, Pharm.D., Susan Davis, Pharm.D., Diane Lynn Levine, M.D.

BACKGROUND:

During pandemics, healthcare professionals are called to provide care. Much has been written about concerns of nurses, less about the concerns of physicians, and even less about the concerns of health professional students.

METHODS:

Convenience sample of third-year medicine and pharmacy students attending an interprofessional safety program. A 10-item survey addressed personal risk, use of personal protective equipment (PPE), attendance at clinical practice sites, knowledge about and preparation for dealing with COVID-19, and impact on professional education. Nine questions used a 5-point Likert scale; one used a 3-answer format (yes/maybe/no). A comment section was provided.

RESULTS:

Of 65 completing the survey, 27 (35.4%) had some level of concern about COVID-19; 7.7% were strongly concerned. More than half (52.3%) responded that they would wear a mask at work. During an epidemic, 4.3% would call in sick, 15.5% would avoid contact with patients, 38.0% would go to their clinical site. When asked about knowledge, 58.5% agreed that they were very or somewhat knowledgeable; 80% disagreed with a statement that their respective program prepared them for dealing with a COVID-19 epidemic. Most (84.6%) wanted their school to provide education about coronavirus geared towards healthcare professionals; 73.9% responded that the school should provide PPE. More than a third (35.4%) were concerned that a coronavirus epidemic will adversely affect their education. Four paired survey items were strongly correlated ($P < 0.05$). Overall, students wanted to be educated, protected from COVID-19, and have their concerns considered.

CONCLUSION:

Medical & Pharmacy educators should proactively address students' concerns about their personal welfare and education during an epidemic. The COVID-19 pandemic is an opportunity to reemphasize the need to include such education into the professional curriculum.

The Effect of a Flipped Classroom Learning Model versus Traditional Lecture Model on Residents' Decision-Making on Lumbar Spine Imaging for Non-Traumatic Back Pain in the Emergency Department

TYPE: Poster

CATEGORY: Research

AUTHORS: Srivarsha Koripella, M.D., Laura Smylie, M.D., Anne Messman, M.D., James Paxton, M.D. MPH, Elizebeth Dubey M.D.

BACKGROUND:

Previous studies have shown that the flipped classroom model of education improves resident satisfaction by increasing learner engagement. However, there are currently no data on whether this approach promotes significant change in resident behavior or knowledge acquisition above traditional learning methods. The ACEP Choosing Wisely Campaign suggests that lumbar imaging should be avoided for non-traumatic back pain in the absence of red-flag exam findings or risks. The primary aim of this study is to determine whether implementation of a flipped classroom intervention results in significant changes in resident decision-making relating to lumbar spine imaging for non-traumatic back pain in the emergency department (ED) when compared to a traditional didactic lecture. The secondary aim is to determine whether the flipped classroom model improves knowledge acquisition for learners when compared to a traditional lecture. This study will contribute to improved understanding of the role of flipped classroom in clinical medical education pertaining to common conditions treated in the ED.

METHODS:

We will perform retrospective review of the electronic health record (EHR) for patients presenting to two academic urban EDs with a primary complaint of non-traumatic back pain over a 12-month period (July 2019-June 2020) including the 6-months before and after the intervention. Resident physicians at the intervention site will receive the flipped classroom intervention while residents at the control site will receive a traditional didactic lecture. Both the intervention and control lecture will be facilitated by the same faculty member. Only patients treated by a resident physician will be reviewed. Patient management outcomes (i.e. appropriateness of lumbar spine imaging) will be extracted from the EHR and compiled into an electronic REDCap database. Outcomes will be compared before and after the flipped classroom intervention to measure the potential impact of the intervention. Residents at both sites will also complete a brief questionnaire before and after the intervention including questions relating to the content of the intervention to measure the degree of knowledge acquisition and retention. Questionnaire data will be de-identified and matched (pre- and post-intervention responses) by a faculty member who is not involved in the delivery of the intervention prior to analysis. Results will be compared utilizing standard statistical tests including paired samples t-test. Results will be reported as mean (with standard deviation), median (with interquartile range), and percentages.

RESULTS:

We have already completed the educational intervention and control lecture including a total of 82 resident physicians (40 at the control site who received the traditional lecture and 42 at the intervention site who received the flipped classroom intervention). Participants at both sites have completed the pre-



and post-intervention questionnaires and these responses have been de-identified and paired. A total of 58 (70.7%) subjects completed both the pre- and post-intervention questionnaire. We are currently scoring the questionnaires and compiling the data for analysis. The EHR chart review is being performed, but is not yet completed. Once we have completed the data extraction and compilation, we will progress to the data analysis phase of the study.

CONCLUSION:

Pending the completion of data collection.

***Medical Student Fears and Needs During Covid19***

TYPE: Poster

CATEGORY: Research

AUTHORS: Hannah Kopinsky, Eva Waineo, M.D., Francine Salinitri, Pharm.D., Diane Levine, M.D.

BACKGROUND:

During pandemics such as COVID19, health care professionals are called upon to help. This role has vast possible consequences on their physical and mental health. Little is known about how medical students, in the unique role of physicians-in-training, view the risks of COVID19 and how they think medical schools could support them.

METHODS:

As part of the Medical Student Check-In Survey, all medical students at WSUSOM were asked to complete 12 questions about COVID19, 11 questions on a one through seven Likert scale and one open-answer. Questions related to knowledge of and adherence to CDC guidelines, worry about safety of self and family, feeling of preparedness to cope, concern about impact of education, and ways the school could reduce stress during this time. The survey was open from April 18th through July 1st, coinciding with the time of the early COVID19 surge in Detroit, limited knowledge about the pandemic, and lack of personal protective equipment.

RESULTS:

Results are based on surveys completed by 93.2% first-year, 95% second-year, 90% third-year, and 84% fourth-year students. Students scored highest on awareness of CDC guidelines (5.94), following CDC guidelines in their personal life (6.12), and wanting school to provide them with education geared toward health care professionals about COVID19 (5.66). Despite students scoring lowest on feeling prepared to deal both with the epidemic (4.20) and a potential exposure (4.22), a significant number wanted to participate in clinical work to the best of their ability (5.38) and were concerned about interruption of their medical education (5.21).

CONCLUSION:

This study provides guidance on medical student concerns early during the COVID19 pandemic. To address the wellness of students during this time, it is vital for administration to proactively reach out to students. This study can guide both current response to COVID19 and inform preparation for future support.





Efficacy of Virtual Seminar in Reducing Hepatitis B Related Stigma

TYPE: Poster

CATEGORY: Research

AUTHORS: Andrew S. Kao, Kaycee Ching, Qingyu Mao, Philip Ma, Cindy Nguyen, Jocelyn Ang M.D.

BACKGROUND:

According to WHO, 257 million people were living with chronic hepatitis B and 887,000 deaths resulted in 2015. In addition, the lack of understanding of HBV's routes of transmission contributes to the fear of close contact. HBV-related stigma may also present as a barrier to treatment and worsen prognosis, calling for the need to improve medical student awareness and knowledge. Our study aims to assess the efficacy of virtual education seminars in improving the understanding of Hepatitis B disease transmission and progression among WSUSOM first and second-year medical students.

METHODS:

Twenty-five M1 and twenty-five M2 WSUSOM medical students completed the pre-seminar questionnaire prior to the session, received thirty minutes of didactic lecture from Dr. Janilla Lee from University of Michigan Health System, and engaged in relevant case studies in randomly assigned small group breakout rooms. All participants then reconvened to discuss the cases. Post-seminar questionnaires were completed at the end of the session.

RESULTS:

There was a significant change in student perception of the transmission route of Hepatitis B (p-value=4.4x10⁻⁶). We found a 41.7% increase in selecting vertical transmission and a 13.7% reduction in selecting close-contact (kissing, handshake) as a possible transmission route.

In the pre-seminar questionnaire, most participants perceived sexual transmission (49.1%) as the more likely route of transmission in a young Asian American woman, whereas the post-seminar questionnaire indicated that vertical transmission (69.6%) as the more likely cause.

CONCLUSION:

The results indicated that the seminar effectively improved student knowledge and reduced misconceptions of HBV transmission. The initial preferential selection of horizontal (sexual) transmission may reflect preconceived notions towards patients when students encounter a clinical case of infectious disease. Future sessions will offer additional insight on the role that medical education seminars play in improving student perception of patients with infectious diseases.



Preliminary Results of a Scoping Review of Preclinical Faculty Wellness

TYPE: Poster

CATEGORY: Research

AUTHORS: Elizabeth Jakubowski, Dr. Katherine Akers Ph.D.

BACKGROUND:

Forming a positive culture in a medical school mandates attention to wellness at both the student and faculty level. However, because the tasks and day-to-day-experiences of medical school faculty can vary widely based on their specific role assignments in the medical school, wellness policy and initiatives should account for the diversity of their experience. This scoping review aims to summarize the body of knowledge published on wellness and job satisfaction for faculty who teach in the preclinical (M1 and M2) years of medical school.

METHODS:

2650 studies were located with search queries for terms including health, wellness, and job satisfaction. After initial screening of abstracts for relevance, 217 papers have been selected for full text analysis. Currently, the authors are in the process of reviewing these papers for inclusion.

RESULTS:

Preliminary results indicate a need for further development of specific wellness policies to support preclinical faculty. Of note was a significant body of research highlighting different wellness measurements or interventions targeting research-track or clinician-educator faculty. However, even this stratification cannot fully encompass the difference between teaching in a preclinical setting vs. teaching in a hospital or recognize the needs of non-M.D. faculty that also teach.

CONCLUSION:

Recognizing the diversity of faculty experience within those employed in a medical school can aid universities in developing strategies to support a culture of wellness. Moving forward, this research will help inform potential initiatives that can support the job satisfaction of faculty who teach within the medical school.





How does organizational communication affect medical student wellness at WSUSOM?

TYPE: Poster

CATEGORY: Research

AUTHORS: Aneesh Hehr, Lacey Brim, Simone K. Brennan, Julie M. Novak

Background: Medical students face a disproportionately high level of anxiety, burnout and psychological distress during their educational training. Alarming, a recent meta-analysis estimates that nearly 1/3 of medical students globally experience anxiety. As such, medical schools have introduced curricular changes and wellness programs in an effort to foster a healthier learning environment. However, there is very little research exploring how communication practices, an integral component in a school of medicine, can influence these outcomes. Therefore, this project aims to elucidate how organizational communication systems can impact mental wellbeing from a medical student's perspective.

METHODS:

This project is a subset of a larger study aimed at mapping organizational communication at Wayne State University School of Medicine (WSUSOM). This study used various approaches to gain a rich perspective from medical students at different levels of training (M1 to M4). Data collection methods included focus groups, individual interviews, and surveys with open ended responses. Thematic analysis and triangulation processes will be used to identify common themes in student responses.

RESULTS:

Following analyses of responses, we hope to identify 1) the most common productive and nonproductive examples of communication with respect to mental wellbeing, and 2) differences in perceived communication-related stress based on level of training.

CONCLUSION:

Identifying how organizational communication influences medical student wellbeing, in both positive and negative ways, may inform the usage of appropriate practices by administration, faculty and students of the WSUSOM community. The results of this project can be useful to any school of medicine with the desire to foster healthier communication practices.



A Qualitative Study of the Perceived Gaps in Professional Communication at Wayne State University School of Medicine (WSUSOM)

TYPE: Poster

CATEGORY: Research

AUTHORS: Aileen Haque, B.S., Lacey Brim, M.A., Simone Brennan, Ph.D., Julie Novak, Ph.D.

BACKGROUND:

The purpose of this study was to examine the WSUSOM's communication system from the medical student perspective and identify its strengths, weaknesses, and areas for improvement. This abstract focuses specifically on how students perceive unprofessionalism in interactions between students and non-student members of the WSUSOM community.

METHODS:

This project is a component of a larger study with the purpose of examining WSUSOM's communication system from the medical student perspective utilizing a qualitative study design. An interview guide was developed using a phenomenological paradigm, deriving the questions from both research literature and questions of interest to the WSUSOM leadership team. Medical students at different training levels (M1 to M4) were invited to participate in one or more of the following data collection methods: focus groups, individual interviews, and surveys with open ended responses. The data was analyzed utilizing using Excel and Atlas.ti 8.0 analytical software and then engaged in a triangulation process to identify common themes in the data set.

RESULTS:

Following qualitative analysis of student responses, unprofessionalism that were identified were organized into four categories: (1) failure to engage with sub-categories of lack of approachability, passive-aggressiveness, and diversity/inclusion behaviors; (2) disrespectful communication with sub-categories of discourteous, condescending, and infighting/discounting behaviors; (3) poor self-awareness with sub-categories of lack of empathy and hypocrisy behaviors; and (4) environment/structure (acknowledging professionalism issues unrelated to individual behaviors).

CONCLUSION:

In conclusion, students perceive and experience numerous instances of unprofessionalism by non-student members of the WSUSOM community. The results of this study can be a foundation the WSUSOM utilizes to work to improve the professionalism experienced by medical students to create a positive environment.





The impact of medical student personal experiences with opioid overdose on knowledge and attitudes towards patients with substance use disorders

TYPE: Poster

CATEGORY: Research

AUTHORS: Kelsey Gockman, Tabitha E. Moses, Anirudh Chitale, Eva Waineo, Mark K. Greenwald

BACKGROUND:

The opioid epidemic has increased the need for overdose management. Stigma and lack of knowledge or confidence may prevent students from recognizing an overdose or intervening. This study assesses whether personal experiences with opioid overdose influence knowledge and attitudes towards patients with OUDs.

METHODS:

First-year medical students completed a baseline survey evaluating clinical experiences, knowledge of and attitudes towards opioid overdose, beliefs about SUD patients, and prior experiences with overdose and SUDs. Chi-square and t-tests were used to evaluate the impact of overdose experience on the Opioid Overdose Knowledge Scale (OOKS), Opioid Overdose Attitude Scale (OOAS), Medical Condition Regard Scale for SUDs (MCRS), and Naloxone Related Risk Compensation Beliefs (NaRRC-B).

RESULTS:

Students who witnessed an overdose (n=33, 12.4%), students who knew someone who overdosed (n=71, 26.7%) and students with no experience did not differ in regard towards SUD patients (MCRS) or naloxone risk compensation beliefs (NaRRC-B). Students who witnessed an overdose were more knowledgeable about overdose risk factors (t=2.90, p=0.005) and naloxone (t=5.13, p<0.001), felt more competent in overdose management (t=3.83, p<0.001), and were more likely to have attended naloxone training ($\chi^2=7.22$, p=0.007).

CONCLUSION:

Previous research suggests students' personal experiences with SUDs impact knowledge and attitudes towards overdose and SUD patients; this is untrue for personal experience with overdose. Most students who witnessed an overdose did so in a clinical setting; these students reported increased overdose knowledge and self-perceived competence relative to students who did not witness an overdose. Students with personal connections to an unseen overdose scored no differently in these measures than students with no overdose experience. This stresses the importance of clinical experience, especially with SUDs, in improving overdose management.



Comparing the Prevalence of Medical Student Mistreatment by Patients at School-Affiliated Sites

TYPE: Poster

CATEGORY: Research

AUTHORS: Emma Drenth, Dariah Lauer, Nichole Tuite, Besma Aly, Akanksha Vaishnav, Ria Minawala, Eva Waineo, M.D., Jason Booza, Ph.D.

BACKGROUND:

Mistreatment of medical students by residents, faculty, and other employees involved in clinical education is a broadly recognized occurrence. However, the extent to which medical students are mistreated by patients is not yet understood. Furthermore, advances in preclinical curricula require students to interact with patients earlier in their medical education. This necessitates the acknowledgment of these patient mistreatment experiences and documentation of the sites at which the experiences occur. This study assesses the most prevalent Wayne State University School of Medicine (WSUSOM) affiliated sites of student-reported patient mistreatment and examines the distribution based on class-year.

METHODS:

Our survey investigating medical student mistreatment by patients, excluding behavior attributed to neuropsychiatric symptoms, was administered to all students enrolled at WSUSOM in April 2020, with a completion rate of 50.7% (n=582). It inquired about the WSUSOM-affiliated locations at which students experienced the self-reported patient mistreatment behaviors.

RESULTS:

Among all respondents, 43% reported at least one experience of patient mistreatment. The most prevalent site of patient mistreatment reported by third- and fourth-year medical students was hospital-based clinical rotations (70.3%, 76.4%), reflecting the pattern of curriculum progression. Student-run or volunteer clinics were the most common site for first-year students (41.5%), with WSUSOM affiliated events and volunteer events (22.0%, 19.5%) as the next common locations. Continuity clinic was the most prevalent site (38.2%) for second-year students, with student-run or volunteer clinics following close behind (32.4%).

CONCLUSION:

As medical schools continue to integrate clinical training earlier into their curricula, it becomes increasingly important to acknowledge patient mistreatment of medical students, both at our institution and nationally. These experiences are not unique to clinical education and often occur outside of the clerkship setting. This knowledge must influence future institutional policies and procedures, and should guide future training opportunities for medical students of all years to help protect them from these harmful encounters.





The Impact of Prior Healthcare Employment on First-Year Medical Students' Knowledge and Attitudes Towards Opioid Use Disorder

TYPE: Poster

CATEGORY: Research

AUTHORS: Lauren Culver, Tabitha Moses, Paige Baal, Tara Gloystein, Shabber Syed, Dr. Eva Waineo, Dr. Mark K. Greenwald

BACKGROUND:

Drug overdose is the leading cause of accidental death in the United States, resulting in 67,367 deaths in 2018 (CDC), nearly 70% of which involved opioids. As strategies develop to combat opioid use disorder (OUD) and overdose, research suggests continued gaps in medical education. Our goal was to study how previous paid employment in healthcare impacted knowledge and attitudes of first-year medical students towards opioid overdose.

METHODS:

We invited first-year medical students at WSU-SOM to complete a 15-minute online survey. Participation was voluntary and confidential. Information obtained included demographics, previous experience with naloxone and OUD, and Opioid Overdose Knowledge and Attitudes Scales (OOKS and OOAS, respectively). Independent t-tests were used to compare results between groups (previous vs. no previous healthcare employment).

RESULTS:

A total of 250 students (50% female, mean age: 23.38 \pm 2.49 years) completed the survey. Of these, 164 (65.6%) reported previous paid experience in healthcare.

No significant differences were found between students with prior healthcare employment and those without on 3 of 4 OOKS subscales: overdose risk factors ($p=0.091$), signs of overdose ($p=0.281$), and actions to take during overdose ($p=0.804$). There was a significant difference in the naloxone use knowledge subscale ($p=0.019$).

Overall, students with previous healthcare employment felt more competent ($p=0.002$) and reported fewer concerns ($p<0.001$) managing an opioid overdose. Interestingly, there was no significant difference between groups in readiness to intervene in an opioid overdose ($p=0.057$).

CONCLUSION:

Students entering medical school with previous healthcare employment had more knowledge about naloxone use and better overall attitudes towards opioid overdose management. While early exposure to OUD had a positive impact, both groups lacked confidence in ability to treat opioid overdose. This study highlights a deficiency in medical education that merits further attention.

UpToDate Use as a Predictor of Medical Student Success: (A Work in Progress)

TYPE: Poster

CATEGORY: Research

AUTHORS: Connor R. Buechler, Kurt Wendland, Jason Booza, Ph.D., Diane Levine

BACKGROUND:

Both practicing physicians and student learners prioritize speed of access and ease of use over most other criteria in choosing how to look up clinical information, with electronic resources far outpacing books for these reasons. While there are many variations of electronic reference materials available, UpToDate is one of, if not the most, frequently referenced clinical knowledge resources. It is professionally written and edited by practicing clinicians with frequent updates as new information or studies become available to inform care, allowing the learner to answer clinical questions rapidly, correctly, and fully. Given its proven popularity, the usefulness of UpToDate as a teaching tool must now be assessed against commonly agreed upon measures of medical student clinical competency.

METHODS:

We will measure the relationship between UpToDate usage, tracked as time logged as well as mouse clicks during each third-year clerkship, and several benchmarks commonly used to indicate medical student clinical competence. The four measures that will be used are (1) NBME clinical subject exam scores for each clerkship, reported as percent correct; (2) RIME score assigned at the end of each clerkship, which rate clinical skills on a scale from R (reporter) to I (interpreter) to M (manager) to E (educator); (3) USMLE Step 2 Clinical Skills score (if available), reported as pass/fail; and (4) USMLE Step 2 Clinical Knowledge score, reported on a scale from 1 to 300. We will use USMLE STEP 1 score as a control variable to control for pre-existing biomedical knowledge. UpToDate usage data is currently being matched to these datapoints for each student and anonymized before further analysis.

RESULTS:

CONCLUSION:

Assessing the utility of UpToDate as a teaching tool to reach validated endpoints of clinical skill will assist in curriculum design and instruction in medical schools and lead to a better prepared future physician workforce, thus benefiting both medical educators and society more broadly.



Evaluation of a Patient Intervention Capture Survey Process in an Interprofessional Student-Run Free Clinic

TYPE: Poster

CATEGORY: Research

AUTHORS: Eugenia Zeng, Dr. Justine S. Gortney Pharm.D., Dr. Jennifer Mendez Ph.D.

BACKGROUND:

In order to evaluate interventions completed by students at CHIP clinic, an interprofessional student-run free clinic, a patient intervention capture survey (PICS) was developed. The PICS generates data regarding educational interventions and services were provided within four disciplines, which are medicine, pharmacy, social work, and physical therapy. The purpose of this study was to evaluate the impact PICS has made to improve interventions within the clinic.

METHODS:

An initial PICS developed in 2016 captured medical education, medications, physical assessments, referrals to other providers, and other services provided by students during the clinic. Results were evaluated and the survey was modified twice for easier data capture and better alignment with interventions with the intention of capturing prospectively. The results of this study are from the original PICS and two modified PICS, which will be presented as original PICS, PICS1, and PICS2.

RESULTS:

The number of patients seen at the student-run free clinic was 101 in the original PICS, 161 in PICS1, and 92 in PICS2, from April 2019 to November 2019. Based on the number of patients seen in PICS2, 95% of patients received some intervention overall. With the original PICS and PICS1, patients who were provided with medical and pharmacy education interventions increased from 58% to 94% with an average of 5.4 to 8.3 patients per month. With PICS2, medical and pharmacy education interventions remained at 94%, with an increased average of 10.6 patients per month. Social work interventions increased from 3.2 interventions and 3.8 referrals in the original PICS, to 4.5 and 4.67 respectively in PICS1, to 10.6 and 7.6 respectively in PICS2. PICS2 also introduced a new set of questions regarding physical therapy education, in which 83% of patients were provided intervention with an average of 8.9 patients per month.

CONCLUSION:

Overall, modifications made to the PICS survey and clinic assessment forms have increased the quality of documentation. A major increase in social work interventions and referrals was due to increased social work student participation, which was addressed since implementation of PICS1. Since the PICS2 was introduced, a fourth discipline, physical therapy, joined the clinic; additional data regarding interventions will be documented accordingly. Continued follow-up and evaluations of interventions captured during clinic will need to be made given these changes.

The Current and Near Future Impact of COVID-19 on Aesthetic Fellowship Programs

TYPE: Poster

CATEGORY: Research

AUTHORS: Gurbani Bedi B.S.; Michael T. Chung, M.D.; Krishna S. Vyas, M.D., Ph.D., M.H.S.; Luis O. Vasconez M.D.; Henry C. Vasconez M.D.

BACKGROUND:

COVID-19 caused a significant impact on United States healthcare, and The Centers for Disease Control originally called for all elective and non-emergent cases to be postponed until the curve of cases had flattened. This particularly affects surgical training, aesthetic surgery included, as programs had to establish rapid solutions that allow residents and fellows to still receive proper training. This project aims to study the current and near-future impact of COVID-19 on both Aesthetic Society-endorsed and non-endorsed aesthetic surgery fellowship programs.

METHODS:

A 23-question anonymous web-based survey was sent to aesthetic surgery fellowship directors with an active program in the United States. Surveys were collected from April 18, 2020 through May 14, 2020 with Qualtrics[®], then analyzed with Microsoft Excel[®]. A 7-question follow-up survey was sent to directors and a 23-question survey was sent to aesthetic surgery fellows. Data for these surveys were collected from June 6, 2020 through August 18, 2020. The surveys asked questions pertaining to adjustments and impact on current fellow training, as well as possible impact on fellows starting in 2020 and 2021.

RESULTS:

There was a 65.5% (19/29) response rate for the initial director survey, a 31% (9/29) rate for the director follow up survey, and a 28% (9/32) rate for the fellow specific survey. All directors and fellows reported that the pandemic had some impact on aesthetic fellow training. 5.3% of directors reported that they believe COVID-19 would have a significant impact on their fellows becoming well-trained aesthetic surgeons, while 66.7% of fellows reported that it will have a mild impact. Predicted impact on future fellows was not as significant.

CONCLUSION:

Telemedicine, educational efforts, and standardization of guidelines can be increased to minimize loss of training due to COVID-19. Ongoing evaluation and shared experiences can assist fellowships in customizing programs to provide well-rounded education during the pandemic.



Medical Student Mistreatment: How does one protect themselves if they are never prepared?

TYPE: Poster

CATEGORY: Research

AUTHORS: Besma Aly , Ria Minawala ,Emma Drenth, Nichole Tuite, Dariah Lauer, Akanksha Vaishnav, Eva Waineo M.D., Jason Booza, Ph.D.

BACKGROUND:

It has been widely documented that medical students are often subjected to mistreatment. As schools continue to integrate clinical training earlier into their curricula, it becomes increasingly important to not only acknowledge these experiences but educate ways to handle the situations and forming coping mechanisms. We aim to study not only the effect of mistreatment, but we also aim to explore implications for institutional change so schools can provide necessary policies, procedures, and most importantly training to its students to be able to handle these unfortunate situations.

METHODS:

The Qualtrics survey was made available to all medical students currently enrolled at WSUSOM between April and June of 2020. This survey modeled the Behaviors Experienced During Medical School section of the AAMC GQ to allow for comparison of prevalence of mistreatment behaviors toward medical students performed by individuals in different roles. A total of 582 students (50.7%) completed the survey, and the results are based on their responses.

RESULTS:

According to the 2020 AAMC GQ, the most common forms of mistreatment experienced by WSUSOM graduates over the course of their education are being public embarrassment (46.9%) and humiliation (24.9%). Overall, 44.6% of WSUSOM graduating students are subject to mistreatment (minus public humiliation). Of those who experienced mistreatment 95% did not report the behaviors. Of those who didn't report 37% stated they didn't think the situation was important enough and 22% did not think anything would be done about it.

CONCLUSION:

The results of this survey make it evident that mistreatment is still significantly prevalent in our institutions. However, it is also prevalent that when these situations do happen students are unable to cope due to lack of training on how to handle situations of mistreatment. This research shows that there is a gap in student education on this issue that needs to be addressed.



Mistreatment by Patients: Learning Environments Affect Academic and Clinical Outcomes

TYPE: Poster

CATEGORY: Research

AUTHORS: Ria Minawala, Nichole Tuite, Emma Drenth, Besma Aly, Dariah Lauer, Akanksha Vaishnav, Eva Waineo M.D., Jason Booza, Ph.D.

BACKGROUND:

Medical students have a multitude of opportunities to practice patient interactions in clinical settings. These experiences play a vital role in applying skills learned in classes. However, incidences of mistreatment by patients may result in adverse outcomes for student performance in academic and clinical environments. Previous studies indicate that student mistreatment impacts confidence to perform clinical duties, and, in turn, interferes with patient care dynamics. This study aims to assess how mistreatment affects patient relationships and student success in academic and clinical settings.

METHODS:

As part of a 2020 study conducted at WSUSOM, a voluntary and anonymous survey was sent out to medical students. Inspired by the AAMC Graduation Questionnaire, the survey assessed the prevalence of mistreatment by patients toward medical students in various clinical settings. Components of the survey included types of mistreatment, reporting of these incidents, and impacts of these behaviors on student wellbeing and medical school performance. In total, 582 students (50.7%) completed the survey and results were based on their responses.

RESULTS:

Impacts of mistreatment were assessed in various contexts. Students reported that mistreatment experience(s) negatively affected their relationship or interactions with patients (25.23%) and the ability to provide quality care to the patients who mistreated them (1.41%). Students also reported that these experience(s) negatively affected feelings of safety within the learning environment (15.02%) and academic performance (3.56%).

CONCLUSION:

This study has important implications for fostering a welcoming clinical environment. If medical students do not feel comfortable in their learning environment, their capacity to provide comprehensive, patient-centered care is greatly affected. With students entering clinical settings in earlier stages of medical school, it is important to consider how these negative interactions can have deep-rooted consequences for future physicians and their ability to make the most out of their training.



INNOVATION

“Medical Education Innovation” refers to innovative curricula that address a current issue within medical education. The innovation should be based on learning principles and be designed to meet a specific need. Examples include but are not limited to health and wellness, quality improvement, patient safety, interprofessional education, service learning.

A Process to Monitor and Improve Scholarly Activity During Residency

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Zain Kulairi, Ankita Aggarwal, Mohammad Fityan, Vesna Tegeltija, Sarwan Kumar

PROBLEM STATEMENT:

Knowing the principles of research and participation of scholarly activity is a requirement of the Accreditation Council for Graduate Medical Education (ACGME).

Efforts to improve scholarly activity include assigning a research director, developing research curriculum and allocating a protected time for research and scholarly activity showed increase in the number of scholarly activities.

We developed a scoring system that was monitored by faculty mentors to assess the improvement of scholarly activity in our academic internal medicine program.

METHODS:

The scholarly activity requirement of the Department of Medicine is designed to comply with PEC guidelines while allowing flexibility for an individual resident to design one or a series of scholarly activities that best support long-term goals.

A scoring system was created to evaluate and monitor the scholarly activities for each resident. Each resident will be required to select and complete tasks from the following list enough to total 21 points during the 3 years of the residency (60 days before expected residency program completion for residents off-cycle). Each academic year the resident will require 7 points minimum to achieve the scholarly activity requirement. Mentorship program with direct supervision from the faculty members will assess the individual scores and they will share the results with each resident during their quarterly meeting and a plan will be made to help the residents to achieve the minimal required score for the academic year.

We used this scoring system:

Peer reviewed publication:

Research project: 21 points 1st author, 7 points for all second authors

QI project: 21 points 1st author, 7 points all second authors

Case Report: 7 points 1st author, 4 points for all second authors

Abstract Publication:

Research project: 7 points 1st author, 4 points for all second authors

Case Report: 5 points 1st author, 2 points for all second authors

QI project: 7 points 1st author, 4 points for all 2nd authors.

Oral Presentation:

Research project: 7 points 1st author, 4 points for all second authors



Case Report: 5 points 1st author, 2 points for all second authors

QI project: 7 points 1st author, 4 points for all 2nd authors.

Poster Presentation:

Research project: 5 points 1st author, 2 points for all second authors

Case Report: 3 points 1st author, 1 point for all second authors

QI project: 5 points 1st author, 2 points for all 2nd authors.

Letter to Editor: 4 points

Book Review: 4 points

RESULTS:

We compared the results of the last 3 academic years. 2 parameters were assessed: Total score achieved by all residents; percentage of residents achieved the minimum requirement.

Total points scored in the academic years 2017-2018, 2018-2019 and 2019-2020 were 255, 374 and 482 respectively. The percentage of residents achieved the minimum requirement were 41.67% in 2017-2018, 48.57% in 2018-2019 and 63.89% in 2019-2020 and we still have 3 more months left in this academic year.

These results reflect a significant increase in the number of scholarly activity and the number of residents who are participating.

CONCLUSION:

Despite the decrease in the number of the conferences and meetings due to COVID-19 pandemic. We had a significant increase in scholarly activities and in resident participation.

We attributed this success to the scoring system that was implemented since it gives the resident the motive to work more to achieve the target points needed for the academic year.



Tracking Professionalism During Residency Training

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Vesna Tegeltija, M.D., Sarwan Kumar, M.D., Zain Kulairi, M.D., Mohammad Fityan, M.D.

PROBLEM STATEMENT:

The Accreditation Council for Graduate Medical Education (ACGME) identified six core competencies as the cornerstone for practicing resident physicians. One of these six core competencies, contributing to the development of a well-rounded and successful physician, is professionalism. Assessing and teaching professionalism has proven to be a difficult task for many residency programs. Our internal medicine residency program adopted a tool to assist with this difficult task. We tested the tool to determine its reliability, feasibility, and validity for assessing residents' professionalism based on favorable and unfavorable behaviors.

Objectives of this intervention are to define professional behaviors, set professionalism expectations and objectively measure resident professionalism with a scoring system tool based on specific behaviors. This professionalism tracker is also intended to not only assess professionalism, but to reward model behavior and respond to breeches in expected professionalism goals. Over time, favorable behaviors will be viewed as highly professional and we hope to change the culture of the program and graduate residents with professional behaviors.

METHODS:

At the start of the academic year, each resident begins the year with a score of 3 on the professionalism scale. Each resident may achieve additional points by displaying favorable behaviors. Points may also be deducted for defined unfavorable behaviors. A score of 2 to 4 indicates average expected professionalism score. A score below 2 is labeled as poor and a score above 4 is labeled as outstanding professionalism. All incidents, both positive and negative, can be reported to any member of the residency administration, including PD, APD, core faculty and chief residents. The professionalism score is reviewed at the semi-annual meeting between the PD/APD and the resident. APD was the designated individual who was tracking professionalism scores and reporting the progress to the program evaluation committee monthly.

RESULTS:

37 rating forms were returned during the study period. Eighteen incidents were favorable and nineteen incidents were unfavorable behaviors. There were 13 incidents reported for interns, 8 incidents for PGY-2 residents and 16 incidents for PGY-3 residents. Most of the incidents reported for PGY-3 residents were unfavorable behaviors and the average professionalism score for the residents was lower, 2.7, compared to interns and PGY-2 residents who had an average score of 3.1. Residents were provided with their scores during semiannual review meetings. The clinical competency committee utilized the scores during professionalism milestone discussions.

**CONCLUSION:**

Our internal medicine residency program struggled with evaluating professionalism in an objective manner. We piloted a professionalism score tracker to objectively assess professionalism during residency training. We found that tool of scoring is feasible to use, and score was utilized during resident meetings and program meetings. It provides formative feedback to residents regarding their professionalism. The challenges include inconsistent reporting and difficulty tracking unless there is a designated individual. Our training program implemented this tool fully during the current academic year and will continue to monitor the progress. We will provide objective professionalism data to the residents and hope to improve overall understanding of professionalism and create a highly professional culture in the program. We also plan to compare professionalism scores with scholarly activity work and in-training exams to note correlation in order to better understand highly professional activities and behaviors that may lead to ultimate culture changes in a program including resident selection and remediation plans.

A Pilot Curriculum and Creation of New Competency Assessment Tools for the Mastery of Chest Computed Tomography (CT) Scan Interpretation for a Pulmonary Critical Care Medicine (PCCM) Fellowship**TYPE:** Oral Presentation**CATEGORY:** Innovation**AUTHORS:** Abdelaziz Mohamed, M.D., Divya Venkat, M.D., Chetna Jinjuvadia, M.D., Ayman Soubani, M.D., Sarah Lee, M.D., Abdulghani Sankari, M.D.**PROBLEM STATEMENT:**

To construct a uniformly consistent learner experience for rapid knowledge acquisition, simulation cases with correlating objective learning checklists were created.

METHODS:

This study that aims to assess the learners' knowledge in anatomy and differential diagnoses, thoroughness in approach, and ability to correctly interpret chest CT scan results after undergoing the pilot curriculum. Learners underwent the following tests and materials:

- a. A fifteen multiple-choice questions (MCQs) test to assess baseline medical knowledge. Discrimination index and difficulty index were used to narrow a pool of forty pilot MCQs (administered to five PCCM attendings, four PCCM third-year fellows, and four third-year internal medicine residents) to fifteen questions. The internal consistency and reliability were calculated using item-total correlation and Cronbach alpha.
- b. A set of five case-scenario simulations with evaluation using a newly created assessment tool,
- c. Education, which includes post-simulation debriefing, a set of newly created video-modules, an online course on interstitial lung diseases, and access to mobile applications,
- d. A fifteen MCQ post-test
- e. A post-test skill assessment using case-scenario simulation.

The content validity of all images and video use were determined by three independent senior faculty.

The video modules were posted on [EDpuzzle.com](https://www.edpuzzle.com). This gave us the ability to monitor usage, time spent on each video by each learner separately.

Measured curriculum outcomes include the proportion of fellows achieving a predetermined passing threshold for scores on the medical knowledge and skills assessments. Fellow's pre- and post-test scores will be compared to evaluate the curriculum's efficacy in meeting the learning objectives.

Fellow's confidence pre and post-course, along with usage rates of the video-modules, will be assessed.

**RESULTS:**

Thirteen first and second-year PCCM fellows (including two first-year critical care medicine fellows) completed pretesting MCQs and case scenario simulation. The results compared to those from five PCCM experts, senior teaching faculty, who underwent the same testing. The fellows averaged 42.1% for the MCQs and 43% for the case scenarios compared to the experts who averaged 82.7% and 73.6%, respectively (p-value <0.001 for both). Post-testing is currently in progress.

CONCLUSION:

A large gap exists in PCCM fellowship training for education and evaluation in thoracic CT scan interpretation. A curriculum based on simulated case scenarios may allow educators to track learners' progress towards achieving expertise and provide a uniform teaching method framework.

**Multiple Choice Question Writing: Training medical students to fulfill an essential role in medical education**

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Garrett Baron, Michael Johnson, Jason Booza, Ph.D.

PROBLEM STATEMENT:

A large proportion of medical education and assessment is conducted through multiple choice question (MCQ) exams, and these exams are most frequently written by Ph.D.s and M.D.s who are far removed from the perspective of a medical student. The MCQ writers can therefore have difficulty developing questions that contain an appropriate level of complexity for medical students. Conversely, questions written by medical students can be perceived to be unreliable or non-representative of future formal assessments.

METHODS:

By designing a curriculum focused on training students in evidence based best practice MCQ writing principles, students of the course will gain essential knowledge in the field of medical education while actively engaging in the process of medical education assessment. Concurrently; participating medical institutions will be enriched through the addition of well-written, systematically reviewed, and appropriately difficult MCQs as a learning resource for junior medical students.

RESULTS:

The curriculum will function in the form of a one-month elective opportunity for fourth year medical students. The elective will involve studying landmark papers in medical education design and medical education assessment systems and applying these papers in the form of written assignments and group discussions. Medical assessment theory will be put into practice through the design of MCQ questions based upon proven writing principles. To date, evidence based MCQ writing guidelines posted by NBME have been aggregated. Work is underway in translating these guidelines into a practical MCQ writing strategy to be learned and utilized by students.

CONCLUSION:

Upon completion of this innovative curriculum, prospective students will gain a deeper understanding of the medical education system, insight into core medical assessment principles, and practical skills in medical assessment design, medical knowledge acquisition, and MCQ writing.





Cultural Competency in Medical School Education: Muslim Patients

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Lana Abdole

PROBLEM STATEMENT:

The patient-physician relationship is an integral part of good healthcare. When a patient happens to be of a different culture and/or religion than the physician, respect and understanding for the difference in culture is imperative to maintain a good relationship. It is important for future physicians to have education on these differences early in medical education, especially in urban settings, such as metro-Detroit, where there is a big minority patient population. A large amount of the minority population is Muslim in this area. Knowledge on certain practices is important, as it may affect patient care. This includes, but not limited to, fasting during Ramadan and the hijab. Fasting can affect many things with patient health, such as timing of prescription medication. It is important to understand the importance of the hijab because many times healthcare workers do not allow enough time for the patient to properly wear it prior to entering, which may be seen as disrespectful and negatively impact the patient-physician relationship. The goal is to increase cultural competency and comfortability of future physicians when working with Muslim patients.

METHODS:

A module will be created with educational content of important Muslim religious/cultural topics that would be helpful to know when treating a patient in this demographic. Students in pre-clinical years will have the option of going through the module. Afterwards, they will complete an anonymous survey reporting how relevant and helpful they found the module, and whether they feel more comfortable interacting with the Muslim patient population.

RESULTS:

Will plan to see the percentage of students who reported benefits to completing the module and whether they feel more comfortable/prepared to interact with Muslim patients.

CONCLUSION:

Depending on the findings, if the module proves to be beneficial, it may be further be incorporated to the curriculum when discussing cultural competency. Could lead to future modules of other cultures and/or religions.



Instructional Scaffolding of Clinical Reasoning Development in an M1 Clinical Skills Course

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Sonal C. Patel, Erin Miller

PROBLEM STATEMENT:

Cultivating clinical reasoning in M1 learners presents a unique challenge, as their limited knowledge of pathophysiology places significant constraints on their ability to engage with disease processes.

Structured instruction on clinical reasoning is limited in clinical skills curriculum.

Student feedback indicates that students do not fully understand the WHY behind clinical skills learning.

Student feedback identified a desire to shift practice opportunities from communication skills to the clinical reasoning skills, which include developing differential diagnoses, summary statements, and problem lists.

METHODS:

Integrate clinical reasoning instruction into every learning session following a Standardized Patient encounter.

Update curriculum map to interleave practice on the development of differential diagnoses, summary statements, problem lists, and note-writing oral presentations.

Introduce a Mental Model to help students examine how clinical reasoning influences the required history-taking and physical examination skills.

Foster Peer-to-Peer creation and analysis of concept maps to summarize findings from Standardized Patient encounters.

Utilize compare/contrast exercises to facilitate clinical reasoning beyond singular patient cases, while operating within the parameters of the M1 fund of knowledge.

RESULTS:

Concept-maps to process information gathered from a standardized patient encounter have become more focused on pertinent findings relative to the top differential diagnoses.

**EVALUATION PLAN:**

Compare note-writing and oral presentation performance to previous years. Extend this analysis to student performance in segment two, to determine if early instruction yields cumulative benefit.

Survey students and assessors to gauge the impact of new instruction.

CONCLUSION:

Clinical reasoning drives students towards mastery of clinical skills competencies.

Structured instruction around clinical reasoning facilitates learning and development.

***Virtual Case Studies Series: Development of Clinical Skills and Patient Population Understanding***

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Marla Rojas Thaireaux, B.A.; Paige Baal, B.S.; Janki Vagharia, MPH; Robert Sherwin, M.D.

PROBLEM STATEMENT:

Due to COVID-19 restrictions, Student Run Free Clinics (SRFC) such as Cass Clinic at WSUSOM cannot offer in-person volunteering. SRFCs provide medical students with an opportunity to enrich their clinical training while being exposed to the needs of underserved patients in the community. To address this gap, a virtual Case Studies and Patient Education Materials series was created. The cases were designed on patients served by the SRFC and were structured to reflect AAMC Core Competencies for Entering Residencies.

METHODS:

First year (M1) and second year (M2) students at WSUSOM elected to participate via Zoom in fall 2020. Case studies included a chief complaint, vital signs, physical exam findings, and relevant past histories. With M2 guidance, the M1s asked questions to elicit the medical history, suggest physical exam maneuvers, and consider differential diagnoses for their case. Students collaborated to arrive at a diagnosis and treatment recommendations. Students then created an infographic based on the condition they identified. These infographics will be distributed at Cass Clinic to educate patients with said condition on behavioral modifications that could improve health outcomes. To evaluate learning and efficacy of the program, pre and post-surveys were completed by students. Survey questions assessed clinical competencies proposed by the AAMC Core Competencies for Entering Residencies.

RESULTS:

Upon completion of the study, responses to post-survey questions regarding students' confidence in meeting select AAMC Core Competencies will be analyzed and compared to confidence levels reported in the pre-survey to assess for improvement in clinical skills. Open-ended questions will be analyzed for themes.

CONCLUSION:

During the COVID-19 pandemic, medical schools and SRFCs face challenges in providing in-person clinical opportunities for students. A Virtual Case Series program allows students to practice skills essential to their development as physicians and create educational materials to empower patients in the Detroit community to manage their own health.





The Effective Inclusion of Caring for Incarcerated Patients into the Wayne School of Medicine Curriculum

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Nicole Sukkarieh

PROBLEM STATEMENT:

The health of patients in the U.S. are put at great risk whilst incarcerated. Being equipped to care for incarcerated patients is not a mandatory part of the curriculum of most medical schools in the U.S. Healthcare professionals are responsible to ensure that future generations of doctors are not part of the problem regarding the health disparities of the incarcerated.

Medical schools in the U.S. would be better served by including caring for incarcerated patients into their curriculums. Preparing all medical students to recognize the relevant disparities and strategies to better serve these populations will ultimately help to improve the health of incarcerated patients. At the level of Wayne SOM, it is important to ensure we are utilizing the best possible method of integrating this material into the curriculum.

METHODS:

Assigning a presentation to the medical students of Wayne SOM that focuses on the given rubric that includes: identifying disparities of the incarcerated population, examining policies that contribute to the disparities of the incarcerated, examining strategies to eliminate the disparities, and discussing opportunities for incorporation of these strategies into future practice. The medical students will present to their peers and physicians.

RESULTS:

The results would be based on a survey of medical students that assesses their confidence on a numerical scale in caring for the incarcerated population, and to ask whether they would change the delivery of the material (yes or no response). The survey would include open-ended feedback on ideas for curriculum improvement, and an open-ended question on a strategy they plan to implement in their future practice in caring for incarcerated patients.

CONCLUSION:

Apply results of the survey to incoming medical students to improve the curriculum and ensure the highest quality of education to future Wayne medical students.



Adding Gratitude and Good Outcomes to Morbidity and Mortality Conference: Highlighting Residents' Hard Work and Achievements in Patient Care

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Leslie McDonough, M.D.; Lindsay Petersen, M.D.; Ann Woodward, M.D.

PROBLEM STATEMENT:

In October 2019, results of a survey given to all residents in ACGME accredited surgery programs following the 2018 American Board of Surgery In Training Examination (ABSITE) exam were published. This was a preamble to the Surgical Education Culture Optimization through targeted interventions based on National comparative Data (SECOND) Trial. This trial aims to study the correlation between mistreatment and burnout, as this has not yet been studied in a large population. Additionally, the SECOND trial aims to address underlying issues contributing to mistreatment and burnout. The 2018 survey results from our institution suggested the residency program had room to improve in multiple domains, including meaning in work, mistreatment, and feeling respected, in comparison to other similar programs nationally. With our participation in the SECOND trial, we were randomized to an intervention arm to address the aforementioned issues.

METHODS:

Programs in the intervention arm of the trial are given access to an online toolkit, with tools targeted toward areas of improvement. Our institution has employed a committee to examine and discuss areas for improvement and implement the toolkit. The committee has chosen to use Gratitude and Good Outcomes (G&G) as part of our weekly Morbidity and Mortality conference, to highlight resident achievements and boost morale.

RESULTS:

G&G is a brief oral presentation by a faculty member, highlighting a resident and their involvement in a good outcome or interaction with a patient for which the patient expressed gratitude. 10 weeks of G&G presentations have been performed with positive feedback. The evaluated endpoint will be the upcoming yearly ACGME and ABSITE surveys.

CONCLUSION:

G&G is an easy, cost-free initiative that can be used at any institution to highlight residents' efforts and achievements, and we expect it will improve the wellness of general surgery residents and meaning in work and feeling respected/valued domains in upcoming surveys.





Healing Between the Lines: Centering community partnerships for structural racism education and health advocacy in medical education

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Cedrick Mutebi, Taylor Barrow, Capricia Bell, Selena Rodriguez Rivera, M.D., Ijeoma Nnodim Opara, M.D., FAAP

PROBLEM STATEMENT:

In Detroit, a person's zip code is one of the largest indicators of their health. When disparities are examined closely, it is found that they fall on racial lines as a manifestation of what is commonly thought to be age-old American discriminatory housing practices that are still alive today: Redlining. Although outlawed in the 1960s, Redlining left a legacy of systemic economic disenfranchisement of Black communities and contributes to the racial wealth gap over the past 40 years. It has also contributed to racial health disparities, a role that is often unspoken in medical education, research, and practice. Healing Between the Lines is a community led training program aimed to educate medical trainees on the impact of structural racism on the health of the community through the lens of Redlining. It will also train them on how to utilize their unique voices and expertise to collaborate with Detroit communities in fighting against the present-day manifestations of historical systemic injustice through advocacy.

METHODS:

Developed through the lens of grass-root activism, trainees will be led through the program by community guardians in 4 phases: History, Accountability, Freedom Dreaming, and Action. Through didactic/interactive sessions, students will be trained on the specific intersection of structural racism and health in Detroit, the skills of equitably analyzing policy, and the epidemiological skills needed to reveal those effects on a population level. Trainees will be matched with a community group through the process and will work with them to propose a policy or program that addresses their priorities.

RESULTS:

Evaluation will be in 2 frames: 1) Pre/post assessments of knowledge related to the presented content, internal beliefs, and confidence taking action for the trainees. 2) Assessment of the engagement of our trainees with the community through pre/post surveys and focus groups with engaged organizations.

CONCLUSION:

Empowering the community to teach about their own health and leading medical education around their priorities will help to improve the future physician's active role in the fight for justice and create deeper relationships between the medical community and the community in which it serves.

Perspectives On Integrating Anti-Racist Health Equity and Social Justice into Medical Education

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Capricia Bell, Sara Saymuah, Manvir Sandhu, Ashleigh Peoples, Suma Alzouhayli

PROBLEM STATEMENT:

Recognizing the systemic oppression of marginalized groups, particularly Black Americans, medical institutions have been critically examining and identifying their roles in addressing injustice. Diversity Week was designed to be beneficial for students at all levels of expertise and address the need for social justice education in medical school curricula. The purpose included discussing the complex topics of racism, discrimination, and institutional injustices as these issues directly impact our diverse patient population and influence the way we practice medicine.

METHODS:

Community experts were strategically and intentionally invited to introduce topics regarding social justice to WSUSOM. Student organizations with interests that aligned with these topics were invited as sponsors. 5 days consisted of 2-hour webinars from 6-8pm EST with topics covering racism in medicine, racism as a form of trauma, intersectionality, discrimination, vulnerable communities, and allyship. Sessions were open to the public and Wayne medical students with the option of service-learning credit for preclinical students. Post-session surveys were completed and focused on identifying students' attitudes and understanding of topics presented.

RESULTS:

Over 1,500 individuals attended the webinars throughout the week including students, faculty, and community leaders. Many students reflected on the uniqueness of the format and the accessibility of the content presented. The sessions were well received as reflected in survey responses which included: Great topics discussed! I think these sessions are very important for the development of well-rounded physicians and I learned so much! I hope to take what I learned and apply it to my daily life.

CONCLUSION:

With the success of Diversity Week, it is evident that there is not only a need for substantive curricula covering these topics but a strong desire by students at this institution that the content in our curriculum is updated to include these important concepts.



Development and Implementation of Scholarly Concentrations for Individualized Medical Student Experience

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Jenna Carter, Michael Franklin, Cooper Laurain, Richard Baker, M.D., Jason Booza, Ph.D., Steven Daveluy, M.D., Sonia Hassan, M.D., Diane Levine, M.D., Jennifer Mendez, Ph.D., Ijeoma Nnodim Opara, M.D., Senthil Rajasekaran M.D., Latonya Riddle-Jones, M.D.,

PROBLEM STATEMENT:

The ideal medical education includes curricular components that allow academic achievement, skill development, and career exploration for medical students. Recently, there has been a desire to enhance medical education by offering individualized education. We sought to accommodate this through the development of scholarly concentrations (SCs) at Wayne State University School of Medicine (WSUSOM).

METHODS:

A SC Subcommittee was developed and composed of a diverse set of stakeholders and educators, including Deans, faculty members as SC leaders, and medical students. A review of current literature on both the development and implementation of SCs was performed to better understand best practices of SCs in undergraduate medical education (UME). Students and faculty worked together to define critical aspects of SC structure, function, leadership, and integration of SC into the WSUSOM UME experience. SCs were designed to support skill development of analytic, creative and critical thinking through individualized and self-directed learning and engaged mentorship. The SCs developed include Basic Science Research, Clinical Science Research, Medical Education, Women's Health, Public Health Advocacy and Community Engagement, and Global Health. The SC programs will be available for optional participation in a pilot phase starting in the 2020-2021 academic year.

RESULTS:

Final evaluation of students will be multifaceted and include an academic product, a combined student self-assessment and mentor-assessment, and reflection on how participation in the SC relates to future career endeavors. To evaluate the effectiveness, we plan to utilize pre- and post- SC self-assessments on competency in the skills described by the SC learning objectives. Additionally, we will collect student and mentor specific goals at the beginning of each project that will allow for assessment of individualized scholarly achievements and satisfaction with the program.

CONCLUSION:

The development of SCs at WSUSOM is expected to provide students an individualized academic experience with close faculty mentorship, facilitating exceptional scholarly achievements and skill development.



Practicing Community Level Intervention to Promote the Health and Well-being of a Vulnerable Population During a Pandemic

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Osama Alkhalili, Kiana Cabasa, Sikander Chohan, Carly Conway, David Huynh, Cassandra Keinath, Crisshara Allen, B.S., Jennifer Mendez, M.D.

PROBLEM STATEMENT:

The responsibilities of future leaders in health care extend beyond exceptional clinical practice. Environmental and social conditions greatly influence health risks and outcomes. A holistic approach to patient care is essential for aspiring physicians including a willingness to take action within communities. The ability to identify risk factors and differences among populations, and implement appropriate interventions, must be emphasized in medical education.

The unique challenges of the COVID-19 pandemic illustrate the need for multidimensionally considerate health care. This crisis creates a major communication barrier, limiting normal interaction, and leading individuals into social isolation. Social isolation is implicated in reduced health awareness and reduced health-seeking behaviors. Isolation worsens health outcomes directly, inducing patient delay for example, and indirectly, following increased stress and diminished quality of life.

According to the Detroit Health Department, City of Detroit seniors age 60 years and over account for 35% of coronavirus cases and 80% of deaths as of October, 2020. Social Isolation further inconveniences this vulnerable population, separating them from support systems and sources of health information.

The ability to communicate through technology lessens the burden of the pandemic. The elderly population's technological inexperience increases their risk of social isolation and downstream consequences on their well-being. The Michigan State Plan on Aging includes objectives to expand and enhance electronic/virtual connectivity with peers, family, friends, and community programs, and to work with faith-based organizations to promote virtual social connectedness. Community level interventions that promote elderly access to technology help accomplish these objectives and improve the health of a vulnerable population during the pandemic.

METHODS:

1. In collaboration with the Detroit Area Agency on Aging (DAAA), a plan to ease the access of the elderly to technology and reduce social isolation during the pandemic was constructed.
2. A training curriculum was selected for development - Zoom tutorial for iPhone and Android devices.
3. The best practices supporting this curriculum were researched and organized into a compendium.
4. The curriculum was developed in the form of an original video and pamphlet.
5. The tutorial was presented to older adult participants and their satisfaction was surveyed to gauge curriculum effectiveness.

**RESULTS:**

Completed Product: Video and Handout (hyperlinks)

From the pilot, older adults have responded positively. The simple steps, enlarged images and font, and slow, clear speech were particularly well received. The Zoom tutorial has helped increase connectivity and knowledge of older adults regarding the use of technology. We continue to make changes based on suggestions with staff of the DAAA.

Upon reflection, we found the project has increased our knowledge regarding health promotion and caregiving using virtual platforms. The project has helped reveal the nuances of a successful community level intervention, especially during a pandemic. We also built a better understanding of the community we are serving, Detroit, and its vulnerable populations.

CONCLUSION:

In conclusion, students recognized a community need during the COVID-19 pandemic and piloted a curriculum to address it. Reducing the social isolation of older adults and caregivers helps maintain their health status throughout the pandemic. The project served as an opportunity for students to gain invaluable experience implementing a community level intervention and tying it to health promotion. We hope to continue appreciating the complexity of health care and engaging with vulnerable populations to improve our medical education.

***A Three-Pronged Approach to Leadership Development for Medical Trainees: Lessons from Leading the Rounds***

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Peter Dimitrion & Caleb Sokolowski

PROBLEM STATEMENT:

Leadership development is overlooked in contemporary medical education, yet medical students and physicians find themselves in leadership roles from the beginning of their training. While other industries, such as the military and corporate business, have formal leadership development courses no formal leadership training program for medical trainees exists. We propose a three-pronged approach to meet this need and improve the leadership abilities as burgeoning physician-leaders based on our experience developing the podcast *Leading the Rounds: The Medical Leadership Podcast*.

METHODS:

We developed a podcast and performed a retrospective analysis on interviews held with leaders in the military, business and healthcare to identify key features common to leadership development programs and to acquire an understanding of health systems.

RESULTS:

Based off of already established military and business programs, and key insights from leaders from a diverse set of fields, we identified three-features that would make an effective leadership development program: 1) Health-Systems Literacy- knowledge of different health systems and quality improvement strategies; 2) Leadership training- dedicated study of various leadership, management, and strategy philosophies alongside case-based & experiential learning; 3) Personal-growth - individualized mentorship and coaching programming to promote reflection and identify purpose for pursuing a career in medicine.

CONCLUSION:

Many of the biggest problems facing medicine- burnout, healthcare inequity, medical waste- need to be addressed by a multi-faceted approach at every level from the individual to system/policy. Integrating leadership development into medical education can promote awareness of these problems and provide students with the tools to begin to be the agents of change. The three prongs described here would be most effective if interwoven into the currently established medical curriculum to promote longitudinal and experiential leadership training without adding unnecessary burden to the already demanding medical-student workload. Additionally, providing students the opportunity to pursue and share their personal experiences in a scholarly environment would promote a feeling of ownership over their own leadership development, with the intention that will continue beyond graduation. It is our hope that we not only introduce the tools, but also reframe the medical trainee's mindset to see them selves beyond medical students as young leaders with the potential to address medicine's biggest problems.





Innovative Discharge Summary and Tailored Resource Guide

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Callie Bartkowiak, Catalina Kenney, Mayra Shafique, Mark Zakrajsek, Michael Saad, Shравan Morisetty

PROBLEM STATEMENT:

How well a patient adheres to a treatment recommended by their health care provider varies across different patients.¹ Often these differences in adherence are due to a patient's lack of understanding of their own disease and treatment, patient's personal belief, lack of a support system, treatment demands, and depression.¹ To improve adherence to treatments, patients need to have a better understanding of the pertinent information related to their illness and treatment. Poor health literacy is considered a risk factor and improving health literacy can improve patient adherence and improve health outcomes.² Up to half of US adults have limited health literacy skills that disproportionately affects racial and ethnic minorities, immigrants, the elderly, and individuals who are low income.³ Individuals with limited health literacy are at greater risk of having poor diabetic control, worsening asthma severity, and obesity.³ Techniques have been used to allow providers to address poor patient literacy by using specific skills such as teach back and use of plain language written materials.³ To further improve health literacy, the use of plain language should be adapted to every aspect of clinical care including the discharge summary. The US Department of Health and Human Services and American Medical Association recommend writing health information at a 6th grade levels.⁴ It is often the case that patients are discharged with information that requires a much higher comprehension.⁴ Providing a discharge summary with enhanced readability in its discharge instructions was associated with decreased readmissions in posthospital settings and also increased health literacy.⁵ Changing the discharge summary to improve health literacy is the first step to help increase patient adherence. The next step is to include a tailored resource guide to help meet the needs of the patient and their health. The resource guide should include information about local organizations and nonprofits to help meet their needs and can improve their support system, a factor that also plays a role in patient adherence.¹ Currently, there is no work related to this proposed addition to the discharge summary. This approach allows physicians to carry out an effective plan of action and avoids patients from becoming overwhelmed from an information overload during the encounter. Reinventing discharge papers to incorporate community specific resources that address social insecurities beyond the scope of disease is a vital step in attaining personalized, holistic care.

METHODS:

Discuss the importance of obtaining a complete social history and doing necessary screenings in order to gather information outside of just the current disease condition (10 minutes). After reading through the case study, participants will think about what type of resources the patient in case study will need (10 minutes). Provide a blank outline of a resource guide to participants (5 minutes). Give participants time to fill out the guide with resources that are specific to the community they practice in and the patients they serve (15 minutes).

RESULTS:

N/A

CONCLUSION:

Applying healthy literacy through the use of a tailored resource guide along with changes in the discharge summary can help mitigate miscommunication and improve health outcomes.



Racism in Medicine: Impact of Discussion Among Medical Students

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Sara Saymuah, Capricia Bell, Manvir Sandhu, Ashleigh Peoples, Suma Alzouhayli, Hailey Heil

PROBLEM STATEMENT:

WSUSOM is dedicated to providing urban clinical excellence in the heart of Detroit and empowering physician leaders that make equitable health care for all, a reality. The Racism in Medicine Summit served to integrate the history of Detroit and its influence on medical education at WSUSOM, emphasize the role of racism in medical education, and empower attendees to identify their role in anti-racist medicine and how they can take action.

METHODS:

The format included a 2-hour webinar with four African-American female physicians moderated by a first-year medical student. The session was open to the public, required for first-year students as part of their learning community curriculum, and open to other Wayne medical students with the option of service-learning credit. Pre- and post-session surveys were completed and focused on identifying students' attitudes and understanding of racism in medicine along with identifying changes in thinking following the event.

RESULTS:

Over 500 individuals attended the summit which included students, faculty, and clinical community members. A majority of respondents indicated that they would like to have similar content in the future. A direct response on the post-survey included, Racism exists in medicine, and many people are negatively affected by it. It's something that needs to be changed and I can be someone who can initiate that change in medicine. On the pre-survey when asked, how familiar are you with specific instances of history of racism in medicine, 15% indicated they were very familiar whereas on the post-survey when asked the same question, 41% indicated they were very familiar.

CONCLUSION:

Overall this was well received and showed that students found the session informative and good use of their time. Many of the comments indicated students have a strong desire for this important education in the medical school curriculum.



Innovations on improving the workflow for physicians as it pertains to Autism screening and comorbid conditions

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Neeli Thati M.D., Roxas Renato, M.D Krista Clancy Ph.D., Mathew J Edick, Ph.D.

PROBLEM STATEMENT:

The Michigan Innovations in Care Coordination (MICC) is a project involving a team of stakeholders that is developing training and tools that will be easily available to physicians and patients. The training and tools were developed by determining barriers that each stakeholder encountered in the system of care. Then innovative solutions for systemic improvement in Wayne County Michigan focused on parent engagement, parent and provider education, and coordination of care using technology to improve communication between providers and patients and the referral process was implemented.

METHODS:

Proper implementation of the M-CHAT was identified to be a barrier to assisting families in the physicians office. A screening tool integrating the MCHAT and demographic information needed by the physician was developed and log in accounts were created for the stakeholders in the system of care. Data will be collected using Patient Education Genius (PEG) that integrates the information the collected at the physician's office with other providers for referral. At the same time patient's receive educational information and resources to help them take the next steps for treatment.

RESULTS:

* Work in progress: Data will be collected on the patient referral process including provider and patient engagement, resources sent to patients and how often the patient accessed the resources. Next steps in the project is to use the data to provide feedback to the physicians to continue improvement in the patient referral process.

CONCLUSION:

The goal of the MICC project is to be a successful care coordination model in Wayne County. The MICC team will have access to all data in the Medicaid data warehouse in order to determine the overall improvement in care for Wayne County. Each physician office will have access to the data collected by their organization. They also will have the ability directly link their data to Wayne County Medicaid when referring for services. This new process of care coordination targets improving the timeliness of accessing evaluation and support services immediately rather than waiting for the patient to initiate the contact with the necessary resources outside the physician's office. This innovative education model will be disseminated through Michigan with the help of stakeholder partners.





Closed-ended method for clinical history taking in foreign languages

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Omar Mahmood, Jawad Bouhamdan, Ala Addin Sid Ahmed

PROBLEM STATEMENT:

In medical schools all over the country, students host clinical language lessons for their peers. Though engaging, these lessons can be ineffective, especially for beginners. Even if a clinician can learn how to formulate questions, asking open-ended questions is not efficacious as the answers will remain incomprehensible if the clinician is unfamiliar with the language. We have designed a field guide for taking clinical history in foreign languages that resolves this problem.

METHODS:

Our guide allows for a complete and brief patient history to be taken using only questions that can be answered with yes, no, or use of fingers. Therefore, an individual need not know the target language to take a patient history. Although not meant for conversation, the questions in this guide can help narrow down the relevant symptoms and potential causes of the HPI.

The guide is hosted on our website, which is linked to a google spreadsheet with the relevant translations. We have thus far used this guide to facilitate role-playing in clinical Arabic lessons. We also include cultural sensitivity pointers on our website for each language.

RESULTS:

The guide is open source, so that people who have knowledge of different languages can all work toward making a more accurate and comprehensive guide. It currently features English, Arabic, Spanish, and Hindustani, along with relevant dialects. For each language we feature romanization and IPA to ease pronunciation. We are also working on audio recordings and recruiting speakers of other languages to work on the guide.

Google Sheets: https://docs.google.com/spreadsheets/d/1-xvt3Clalch0l_60WVGZNiz9hcoZfqIwOZEoQCyhHKGA/edit#gid=271513770

Website: <https://syedom.wixsite.com/website>

CONCLUSION:

We plan to share the guide with clinical language clubs in medical schools around the country and world, as well as with NGOs. We believe that this guide can become a useful and easy-to-use reference for clinicians of all stripes, as well as a staple in medical language education.

The Development of Curriculum and an Assessment Tool to explore Social Accountability

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Nakia V. Allen, M.D., Sonal C. Patel, M.A., Denise White-Perkins, M.D. Ph.D.

PROBLEM STATEMENT:

Social accountability provides a framework for medical providers to consider the deleterious effects of social determinants of health (SDOH) during routine medical practice in order to improve health outcomes. While medical school curricula has become adept at exposing students to the SDOH, it falls short at assessing whether medical students develop the skills necessary to address SDOH or monitoring the actionable modifications trainees utilize during encounters to positively influence patient outcomes.

METHODS:

We developed a series of two-hour modules and a tool for this project. Each module required students to examine one specific component of SDOH (economic stability or the community and social context), by digging deeper into systems and policies that influence communities and identifying targeted intervention to advocate for healthcare equity. The modules define the micro, meso and macro concepts of social accountability, challenges them to analyze trends in how SDOH impact our local urban patient population, and guides them to curate existing interventions or propose strategies to advocate for healthcare equity in Detroit. Our assessment tool measures students comprehension of health outcomes, cultural awareness and level of socially accountable analysis of community challenges.

RESULTS:

Lessons Learned/Works in Progress

The modules allow students to construct their understanding of social accountability as they explore assignments and progress along a continuum of longitudinal growth. We hope to have a strong framework by which we can evaluate the level of community engagement as students interact with others to enact our socially accountable mission.

CONCLUSION:

The development of the modules and the assessment rubric offer guidelines ensuring that students are aware of social inequity and impact community health outcomes. The development of a comprehensive and curriculum wide-based assessment of social accountability will be useful as we develop and utilize graduation competencies responsive to the needs of our community.



Indication for Asking for Gender Pronouns in Healthcare Settings

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Talal Alsheqaih, Dr. Julie Novak Ph.D.

PROBLEM STATEMENT:

LGBT individuals face a different set of healthcare issues that need to be addressed and communicated in a healthcare setting. The need for providers who can identify LGBT individuals and allow them to be comfortable in sharing their concerns is an integral part in managing their health. Often LGBT individuals do not feel comfortable discussing these topics due to the lack of questions providers ask to start the conversation. Many individuals avoid discussing LGBT health and attempt to address the most pressing chief complaint without giving the full picture. The stigma and discrimination LGBT individuals and specifically transgender individuals face in life including in healthcare settings prevents such individuals to seek care even when facing major health concerns. The US Transgender Discrimination Survey results suggested that among transgender adults, nearly 1 in 5 (19%) had been denied care because of their TGD identity (Grant). In the Canadian Trans Youth Survey (CTYHS) it was noted that one thirds of transgender youth have forgone physical health and two thirds have forgone mental health (Clark). These issues are compounded by the added stress on the transgender community with stigma and marginalization. In addition, LGBT individuals face a variation of healthcare needs that do not apply to the general cis gender population that need to be addressed.

Studies have been conducted to explore the need for using the correct gender pronouns in healthcare settings and the dire need for such practice to be normalized. The current standard of care follows the normative gender rules as if one appears feminine, they are referred to as she and if they appear masculine, they are referred to as he. This raises the issue of making assumption as to what gender identity an individual perceives themselves to be. In addition, providers lack the understanding of non-binary gender pronouns and their use in daily language. personal pronouns used to reference nonbinary gender individuals (e.g., they, them, ze, or zir) are unrelated to feminine or masculine gender expression and may be unfamiliar to health care providers (Brown). As trivial as asking for gender pronouns seems it is a huge step towards the social tolerance long due in this community. Using pronouns that are not gender affirming is considered extremely harmful to individuals who are non-binary as it is a form of misgendering (Yarbrough).

In a study done in Minnesota, Massachusetts and British Columbia, Canada the topic of gender pronouns was explored by interviewing youth asking them about their view on the topic. The youth interviewed in this study displayed positive attitudes towards gender pronoun checking during the medical interview and in other clinical settings. A few participants indicated that is important to ask patients for their pronouns early even if the patient is presenting as male or female because it is integral for establishing rapport in the patient/doctor interaction even in such settings as urgent care (Brown). The activity in this assignment is to address the proper way of asking for gender pronouns in each patient interaction and in different healthcare settings (Physician, public health professional, social worker, etc.). The assignment includes knowing when to ask for such information, addressing differing views and reactions from patients towards the question being asked and indications in each field that would enhance the quality of care provided to every patient.

Patient centered communication is an important part of developing a good patient/provider rapport and asking for the correct pronoun focuses the conversation to the patient and develops that respect towards the patient. In the Bayer-Fetzer conference on patient-physician communication the patient centered approach was discussed and resulted in seven major elements that were titled Kalamazoo Consensus Statements (Joyce). These seven elements were build the relationship, open the discussion, gather information, understand the patient's perspective, share information reach agreement, and provide closure (Joyce). This idea was tested later in medical education and evaluated through standardized patient observation and communication. Many of these elements are tied to the idea of asking about gender pronouns. As starting with asking about pronouns will be a part of each of these seven elements and without asking the communication is hindered and the visit will not provide the patient with a safe patient centered environment.

METHODS:

Prior to the activity, each student is expected to read articles about the adverse effects of misgendering patients, importance of using correct gender pronouns in building patient/doctor rapport and major health issues stemming from stigma in the transgender community. Each group of students will be assigned the role of a different healthcare professional participating in patient interactions. Group one will play the role of a physician meeting a new patient. Group two will play the role of a social worker meeting a new patient. Group three will be a public health professional working on a new project in a underserved area. Students are expected to work together in their groups to come up with best practice methods to identify gender pronouns and reacting to patient's response to such questions.

Each group is given a handout that explains the patient interaction. This is also displayed on PowerPoint. The situation will be with two different patients one of which is a transgender patient who is in dire need of addressing their health issues while being concerned about the stigma associated with such topics. The other interaction will be with a cis gender elder female patient who finds the question offensive and does not enjoy being asked such questions as they are insulting to her. This patient feels as that the provider is questioning her gender identity by asking about her gender pronouns. Students are expected to tackle both situations and come up with a proper response in addressing both patients while remaining culturally sensitive and catering to the needs of each patient.

After reading the situation, groups are given 10 minutes to come up with the way they would start the medical interaction with the first patient and come up with a response to the second patient while addressing the proper time to ask for gender pronouns and how to best tackle each patient while providing them with quality care. In addition, groups will explore what would happen in each situation if gender was not discussed, if gender was discussed, and methods to standardize the discussion of gender to normalize it in the general public.

After each group finishes with discussion, they present these to the class. Each group is expected to present their answers in these hypothetical situations in a three-minute window. They are to discuss the topics mentioned above and ideas they might find interesting during the discussion to improve methods in tackling this issue and normalizing gender pronoun questions.

**RESULTS:****Limitations**

The learning activity described here requires the students to be open minded and display tolerance and understanding whether it is congruent with their own beliefs or not. There is also ample preparation required prior to the session to ensure that students are aware of gender pronouns and their current use in clinical settings. In addition, the situations presented need proper detail to allow students to respond and react. The situations could raise many issues that are inflammatory and require each healthcare provider to put their views aside for the betterment of the patient's health. The group project is designed for a 20-minute interaction and this assignment requires time as many topics will not be discussed in a 20-minute time window requiring students to summarize their thoughts and present the most pressing and important aspects of this interaction in their discussion. Also, it might difficult for health communication students to envision the interaction from the perspective of a health professional in a field they are not interested in and do not want to pursue in the future.

Variations

This activity could be done with the transgender patient alone in the interaction but for the sake of allowing the students to see different responses and prepare them to tackle different sides of the issue the cis gender female interaction was added. Also, this activity could be done at a local LGBT clinic geared to tackle LGBT health issues, which would add the expectation of understanding these health issues and how to tackle them properly requiring the students to conduct more research prior to their respective sessions. Another variation to this assignment is to generalize the role of the healthcare provider without specifying a role for the students to take on.

CONCLUSION:

This activity is designed to introduce the construct of gender pronouns and the correct use and importance of learning and updating one's knowledge. It raises awarenesses but also capture interest in exploring these topics further and becoming proficient in gender pronoun "language" with the goal of creating a safe environment for patients to discuss all aspects of their healthcare without the fear of stigma or discrimination.

***Improving Peer Education of History Taking in the Clinical Skills Curriculum of Pre-Clinical Undergraduate Medical Education at WSUSOM*****TYPE:** Oral Presentation**CATEGORY:** Innovation**AUTHORS:** Victoria Badia**PROBLEM STATEMENT:**

As medical schools incorporate clinical exposure into preclinical curricula, students start their medical education eager to develop these skills. Our students participate in simulated patient encounters during the Clinical Skills course. To supplement the course, sessions were implemented in which Segment 2 students act as peer educators for Segment 1 students, as students generally feel most comfortable in a learning environment where instructors are peer educators. Previous sessions were held in large groups, which made it difficult to evaluate individual students' history-taking skills. This year, the program is structured so there is a 1:1 ratio of Segment 1 students to Segment 2 students to facilitate high quality individual feedback.

METHODS:

Six virtual practice sessions were held in which Segment 2 students act as patients and are provided with a script of answers to commonly asked history-taking questions. Segment 1 students have 20 minutes to collect a history and Segment 2 students have 10 minutes to provide feedback. Segment 1 students complete a post-survey to report whether they feel more prepared for their simulated patient encounter after the session. To assess long term development of this skill, we will determine whether students who participated in these sessions scored higher on the history-taking component of the Clinical Skills assessment than those who did not.

RESULTS:

Preliminary survey results reveal that students feel more prepared for simulated encounters after attending the sessions. We anticipate that these students will also score higher on the history-taking component of the Clinical Skills assessment.

CONCLUSION:

Virtual practice sessions in which Segment 2 students act as patients and Segment 1 students practice history-taking help students feel more prepared for their simulated encounters. These sessions also contribute to students' long term development of history-taking skills, as evidenced by higher scores on the history-taking component of the Clinical Skills assessment.





Moving the Didactic Needle: The Conversion to Engaging Synchronous and Asynchronous Remote Learning

TYPE: Oral Presentation

CATEGORY: Innovation

AUTHORS: Mara M. Hoffert, Ph.D. and Anastasia Mortimore, EdS

PROBLEM STATEMENT:

Henry Ford Hospital System (HFHS), a large urban teaching hospital in Detroit, Michigan, was a major hotspot during the COVID-19 surge. With over 50 residency and fellowship programs, formal teaching activities were interrupted. The hospital declared a Stage 3 pandemic emergency status. Therefore, the graduate medical education instructional designers created a system where physician-facilitators were trained and led asynchronous and synchronous remote sessions to be delivered to all incoming PGY1 interns and fellowship programs. We will: 1) share design challenges and strategies to overcome these challenges for creating online asynchronous and synchronous events; 2) outline the specifics of our courses; and 3) highlight key behaviors and activities that facilitators can take to improve their online teaching.

METHODS:

HFHS' instructional designers are trained in adult educational theory and work alongside medical professionals to develop effective educational programs. Faculty were struggling with online teaching, so HFHS instructional designers: 1) generated sessions using tools such as Articulate and Cornerstone; 2) physicians were trained to facilitate modules remotely; and 3) Instructional Designers moderated online sessions; 4) trainees were enrolled in three asynchronous modules; and 5) Standardized Patient Encounters allowed trainees to apply communication skills to simulated scenarios. SPs and physician debriefers provided feedback.

RESULTS:

1. Administered a post survey after each module.
2. After the patient encounter, trainees were scored based upon the skills they learned in didactics
3. Trainees completed a knowledge-based test for asynchronous modules.

CONCLUSION:

Conducting an online synchronous event is challenging
Practicing, redesigning visual presentations, eye contact, and training physician facilitators is critical.
Strategies for keeping participants engaged must be considered
Asynchronous modules are best when trainees must interact with the content
Instructional Designers must master educational practices with technology
More training and technological support are needed for physician educators.

Mental Health First Aid Training for All First Year Medical Students: Baseline Knowledge, Attitudes, and Immediate Impact

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Anita Ukani, Tiffani Strickland, Margit Chadwell M.D., Eva Waineo M.D.

PROBLEM STATEMENT:

Studies show medical students have a higher prevalence of anxiety and depression than age-matched peers and up to 11% admit to suicidal thoughts in the past year (1). Recent studies have shown the importance of peer engagement in addressing mental health and supporting those experiencing distress (2).

Mental Health First Aid Training (MHFAT) is an established course which teaches participants how to recognize and respond to a mental health crisis. Although a study demonstrates improvement in confidence and knowledge in UK students, little is known about the impact of MHFAT on U.S. medical students. Following favorable pilot group results presented at AAMC Learn Lead Serve, this study aims to evaluate the longitudinal impact of MHFAT upon a large cohort of first-year medical students, and its potential to aid wider efforts to improve peer support and mental health resources.

METHODS:

MHFAT was administered over Zoom to the entire class of first-year medical students as part of the orientation curriculum at WSUSOM. Surveys were anonymously administered to participants (n=290) before training (94% response rate) and immediately after training (71% response rate). Surveys assessed students' attitudes, confidence, and knowledge about mental health problems and ways to intervene.

RESULTS:

When surveyed immediately following the training, participants reported an increase in mean percentage of self-reported confidence levels (51% before training, 85% after), and knowledge regarding mental health problems (46% before training, 77% after). The percentage of participants who felt confident in helping someone in a mental health crisis increased from 63.47% to 92%.

CONCLUSION:

This study demonstrated an increase in student knowledge and confidence in responding to a mental health crisis. Empowering the student body to recognize and offer support to peers in distress may improve student health and wellbeing. Six-month follow-up data will provide further insight into whether improvements were sustained and translated into interactions with both patients and peers.



A Near-peer Internship Bootcamp: a Novel Approach to Internship Orientation

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Rashid Alhusain, Mowjad Khalid, Nabil Al-Kourainy, Jarret J. Weinberger, Diane L. Levine

PROBLEM STATEMENT:

Many interns experience challenges in their new roles as physicians. Orientation and onboarding are typically delivered by faculty/administration and do not focus on the intern's daily duties from near-peer perspectives. To address this, we developed a short, focused, mentorship Bootcamp program delivered by residents to help interns with their roles and responsibilities. This included mentorship in oral presentations, the written composition of notes, and guidance for utilizing the electronic health record (EHR) to provide efficient and effective patient care.

METHODS:

The program was conducted over six days from June 25th to June 30th, 2020, at Wayne State University/ Detroit Medical Center, in Detroit, MI. Participation was voluntary. Interested senior residents (mentors) were assigned incoming interns (mentees) on a 1:2 basis. Mentors met with mentees during five sessions lasting between 40-60 minutes per session. Virtual meetings were conducted in light of the COVID-19 pandemic. A 14-question post-program survey was conducted to assess the participant's perceptions, experience, and overall satisfaction with the program.

RESULTS:

A total of 15 senior residents (11 PGY-1 and 4 PGY2) and 29 interns (76% of the program's total interns) participated. Of those who participated, 18 (62.1%) responded to the survey. 83.3% of respondents reported that the program helped them better understand the daily workflow; 49.9% expressed that they were more comfortable navigating the EHR. All respondents (100%) agreed the program should continue in the next academic year, with 83% responding that they would be willing to participate next year as mentors.

CONCLUSION:

A short and focused near-peer mentor program, prior to the start of the intern year, positively impacted the daily workflow, comfort in navigating the EHR, and critical skills required by interns. Due to an overwhelmingly positive response, we will work in the next academic year to incorporate this program directly into the interns' orientation curriculum.



Climbing Up the Engagement Ladder: Outcomes of a Student and Faculty Collaborative Curricular Redesign

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Riddhi Amin, Senthil Rajasekaran, M.D., MMHPE, FCP

PROBLEM STATEMENT:

Medical students have a lot of information to learn in a short period of time. Especially with the mindset of learning only what is important for the boards, medical students often disregard faculty lectures and embrace outside board review material. This can lead to disengagement of students with the faculty and school's curriculum. For the Wayne State University School of Medicine's second-year neuropathology course, a course director and a 4th year medical student worked to co-create and design an interactive curriculum. The redesign involved elimination of didactic lectures, giving students access to Osmosis videos and recordings of prior year lectures as content. Following self-study of the material, students will be required to participate in an innovative peer-facilitated small group case-based learning sessions. This is a departure from the previous model, where the course had a series of didactic lectures and faculty facilitated small group sessions. The goal was to evaluate the impact and analyze student perceptions of such a redesign.

METHODS:

Survey questions will be administered before and after the course using the online New Innovations platform. Data will be collected anonymously and analyzed using descriptive and numerical statistics. A virtual focus group will also be conducted after the course to collect qualitative feedback from participants. Data will be compiled and analyzed using descriptive statistics.

RESULTS:

Course currently in progress and results will be shared during the presentation.

CONCLUSION:

Although a conclusion is yet to be made, the study will look at any statistically significant changes in student performance and also analyze student feedback about the innovative redesign of the course. The study will also shine light on the opportunity to co-create curriculum with upper class students as they are most proximal to the recipients of the curriculum.





Incorporation of Student Co-Facilitators in Segment-1 Problem Based Learning Sessions

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Kenan Alhayek, Katie R. Adlaka, Erika Roberts

PROBLEM STATEMENT:

With a large population at Wayne State University School of Medicine and limited faculty to facilitate small-group learning, Problem Based Learning (PBL) sessions have historically been led by science-based faculty or non-science staff members. We investigated whether the incorporation of Segment 2-4 students as co-facilitators could enhance the current learning experience while also providing an avenue for near-peer learning.

METHODS:

Segment-1 students, 292, were placed into groups of 8-9. Each group was randomly assigned a faculty/staff member and student co-facilitator to run the session; 34 groups were formed. The 34 student co-facilitators were volunteers from a population of teaching-oriented programs including Supplemental Instruction Leaders, Learning Coaches, and Case Studies Leaders. Student co-facilitators received the same training as faculty/staff members. All participants were asked to complete a survey at the conclusion of the PBL session to evaluate their satisfaction with student co-facilitation.

RESULTS:

Of the 360 individuals eligible for the survey, 307 responded (85.04%). Student respondents (n=280) included Segment-1 students and student co-facilitators. 266 students indicated that they were positively satisfied, 10 were neutral, and 3 were dissatisfied with co-facilitator incorporation. In response to whether they would like to see student co-facilitators return for future sessions, students responded Yes (n=233), No (n=3) and Neutral (n=44). With regard to faculty/staff (n=27), 25 were positively satisfied with 2 dissatisfied. With respect to co-facilitator return, responses included Yes (n=22), No (n=2), and Neutral (n=3).

CONCLUSION:

94.8% of respondents were satisfied with the incorporation of student co-facilitators and 83% indicated that they would like to see them return for future sessions. Adding student co-facilitators to PBL sessions resulted in positive feedback and warrants future attention to evaluate the efficacy of their inclusion in improving the Segment-1 learning experience.



A Survey of Patient Satisfaction With Telehealth Services During The CoVID-19 Pandemic

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Candace Acuff, MPH, Brittany Brauer, M.S., Renieh Nabaty, Jaffar Elminini, Heather N. Abraham, M.D.

PROBLEM STATEMENT:

Throughout the COVID-19 pandemic the use of telemedicine has dramatically increased, and its use will likely continue afterwards. As it has also brought about challenges for patients, providers, and medical students, continued evaluation is necessary. With the increasing implementation of telehealth patient satisfaction continues to be of question. This study aims to assess the quality of telehealth services provided to patients seen at the GMAP Clinic site in Detroit, MI.

METHODS:

During the month of July, 167 patients were called to assess their satisfaction with telehealth services provided between March and July. Of 167 patients called, 79 patients completed the GMAP telehealth satisfaction survey which was constructed by medical students and physicians within the Department of Internal Medicine at WSU SOM. This data is being used to evaluate patient satisfaction with telehealth services and improve telehealth training within the medical school curriculum.

RESULTS:

Out of the 79 patients who were surveyed, 66% were female and 34% were male ranging in age from 18-74 years. 84% of patients expressed that this was their first experience with telemedicine. Majority of patients expressed being comfortable with sharing details about their health concerns via telemedicine, with only 3% being uncomfortable. 88% of patients, assessed on their willingness to participate in future telemedicine visits, stated that they would do another visit. 14% of patients stated that they were still uncomfortable with telemedicine after their first encounter, 26% were neutral, and 60% felt some level of comfort.

CONCLUSION:

This survey evaluates patient comfort with their physician and the use of technology. It also evaluates whether patients felt like their social and medical needs were met virtually, and their preference for future in person vs. telemedicine visits. Results of this study will help physicians optimize interactions through telemedicine with future patients and guide medical schools as they develop telemedicine curriculums.





Expanding Medical Student Engagement in Wellness Initiatives at Wayne State University School of Medicine

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Katelyn Kerr, Thomas Sprys-Tellner, Ellie Lewandowski, Marla Krasnick, Eva Waineo M.D.

PROBLEM STATEMENT:

Medical students face higher risk for depression, anxiety, and burnout (1). A recent study revealed that stress in medical students has increased due to the COVID19 pandemic (2). While solutions have been proposed to improve medical students' wellness, research has not focused on effective ways to gauge interest and increase engagement in virtual activities provided at the medical school level. Our research aims to explore effective ways to increase engagement of medical students in these virtual wellness activities.

METHODS:

To assess potential interest, a Qualtrics survey will be administered to 300 first-year medical students to gauge interest in attending specific events, ideas for new events, and the optimal timing for participation. Proposed events will include virtual events via Zoom and social media challenges. Virtual Zoom events include exercise classes, peer support groups, and cooking classes which students can sign up to attend. Social media challenges include nutrition, fitness, and meditation challenges that will be completed via Instagram. Communication will be continued using diverse methods including email, health and wellness newsletter, MedTalk, and town halls.

RESULTS:

Survey results will be tracked to assess student interest. The top three events with the most votes will be implemented within the month. Student attendance at events will be tracked. Following initiatives, students will be asked for feedback of the event, how they found out about the event, and why they attended. The impact of virtual events will be examined based on student responses.

CONCLUSION:

Engagement in virtual wellness initiatives is an effective means to support the wellness of medical students. An understanding of methods used to gauge interest and communication is important to increase participation in wellness activities. Through comprehensive surveying and analysis, more impactful initiatives can be created to increase student engagement and better address wellness in medical students.



Virtual Room of Horrors: Transforming a quality improvement education program to a virtual setting with the goal of early introduction of quality improvement and awareness of patient safety and medical errors to medical students

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Megan Walsh, Jie Chi M.D., Lea Monday Pharm.D. M.D., Omid Yazdanpanah M.D., Mowiyad Khalid M.D., Caleb Sokolowski, Diane L Levine M.D.

PROBLEM STATEMENT:

Medical error is a common cause of morbidity and mortality in medical centers. Kaizen is a philosophy in quality improvement (QI) that everyone is responsible in recognizing, suggesting, and implementing improvements. Medical students can be an important part of quality improvement and patient safety (QIPS) initiatives. However, standardized education and assessment for them is lacking.

METHODS:

We designed an educational program using Plan-Do-Study-Act (PDSA) methodology in an interactive way for medical students. Due to covid-19, it was in virtual format in compliance with social distancing. Plan: A simulated Room of Horrors was designed with a case scenario including a mock patient chart, a staged and photographed patient room. They totally contained 24 common hospital-based patient safety threats (prescribing errors, infectious control concerns, allergies and contraindications, and privacy errors). 46 medical students participated in this 75-minute event. Do: Initially, participants' baseline QI knowledge was measured by a 5-question quiz. Following that, learners were given 20 minutes to identify top ten safety hazards. Debriefing session was provided after that to review the safety errors and to also discuss QI methodology. We concluded the session by a post-test evaluation of participants' QI comprehension.

RESULTS:

Participants' knowledge was evaluated by the mean percentage of correct answers, 18% in pre-test (SD =0.22) and 69% in post-test (SD=0.33) with P=0.00003. Students reported 2.06/5 (SD =0.92) level of QI self-efficacy prior to the program compared with 3.48/5 (SD =0.98) after the session (P= .0004). Likelihood of students' participation in QI projects on pre-test was 3.75/5 (SD = 0.7) and 4.38/5 on post-test (P= .003).

CONCLUSION:

Room of Horrors not only significantly improved students' QI knowledge, but also effectively motivated them to get involved in QI initiatives. Act: We plan to implement this activity within clerkship curriculum of all medical students.





Patient Safety Day: a virtual initiative to improve medical student knowledge of quality theory

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Caleb Sokolowski, Megan Walsh, and Diane Levine

PROBLEM STATEMENT:

Medical errors are estimated to be the third leading cause of death in the United States (1). Despite this, patient safety and quality improvement are often an overlooked part of medical training. The goal of this project is to improve the knowledge of first year medical students on quality theory and patient safety.

METHODS:

Since the cancellation of in person learning due to the COVID-19 pandemic, Patient Safety Day was adjusted to an online format. Using the Zoom platform, a short patient safety lecture was given, then students were sent to breakout rooms based on a medical specialty of their choice. In these rooms, students were given a quality improvement (QI) and/or patient safety-related problem within that specialty. Students developed an aim, created a driver diagram, and designed PDSA (plan, do, study, act) cycles that could be implemented based on the problem. Students were evaluated using a pre and post-test survey that gauged their understanding of quality theory and confidence in designing a QI project.

RESULTS:

Based on our QI test, we saw an 18 percent increase in quality systems theory knowledge. There was also a self perceived increase in knowledge as 92 percent of students said they agree that they improved their QI knowledge. 81 percent of Students also stated that they were more equipped to start their own project.

CONCLUSION:

Using an interactive online platform, quality theory can be taught through formal lecture and small group interaction. This functions as an effective way to educate physicians in training about QI in healthcare. This project showed an increase in understanding of quality theory as well as student appreciation for early exposure to clinical quality science. Although more study is needed, it is our hope that this will translate to better care for patients in the future.



Survey Assessing the Attitudes and Knowledge of Programs on Gender Equity

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Miloni Shah, Dr. Beena Sood, M.D., M.S., FAAP, Kate Sheppard, MPH, MSW

PROBLEM STATEMENT:

As of 2020, more than half of medical students in the United States are women. However, numerous barriers negatively affect women's opportunities in the medical field. These factors include a lack of support of maternity leave and childbearing, absence of mentorship programs, workplace harassment, and gendered implicit biases. Residency and fellowship programs are a key part of medical training, where women must be given the agency and opportunity to grow in their field. Therefore, it is important to gain insight from future and current physicians in training about the improvements they hope to see in their medical training.

METHODS:

Medical students from WSUSOM completed an anonymous Qualtrics survey. The questions were adopted from both the ACP Recommendations for Gender Equity and the Family Friendly Practices portion of American Pediatrics' Annual Survey of Graduating Residents. Students were asked to rank how important certain factors/benefits were in selecting a future training program scale, as well as future recommendations to improve gender equity.

RESULTS:

Thus far, 129 medical students have completed the survey. Initial results indicate that the top three gender equity factors that are most important to medical students include proper understanding of reporting procedures for harassment, the ability to utilize harassment reporting procedures without fear of negative consequences, and inclusion of female members on job search committees. In terms of family friendly practices, the three most important factors included a flexible rotational and daily schedule and care for ill children. Future recommendations emphasized improvement in parental leave, mentorship, and implicit bias training.

CONCLUSION:

There must be a greater emphasis on improving gender equity policies in medical training programs in order to create equal opportunities for growth and success. Medical students indicate an importance of family friendly practices, improved harassment reporting procedures, flexible scheduling, and female leadership.





High-Yield Practical Emergency Skills (HYPES) for Pre-Clinical Medical Students

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Katherine Palmer Loveluck, Lauren Shawver, Claire Novelly, Elizabeth Jakubowski, Katherine E. Brown, Kendrick Belardo, Adam Olszewski, and Kristiana Kaufmann M.D., MPH

PROBLEM STATEMENT:

Medical schools in the USA currently do not require education on basic first aid skills. To address this lack of knowledge we have developed a first aid course, High Yield Practical Emergency Skills (HYPES), for pre-clinical medical students. The topics covered include Rescue Basics and Safety, Patient Assessment, Airway and Breathing Emergencies, Circulation Emergencies, Disability and Deformity Emergencies, and Environmental Emergencies and Triage. Due to COVID-19 we have transitioned to a virtual platform which has allowed us to not only include Wayne State medical students but also integrate students from other regional medical schools and other graduate medical programs. The ability to broadcast to a wider audience allows for more students to be trained, increases the evaluation capacity of the series, and encourages integration of HYPES into other schools programming.

METHODS:

Student's knowledge and learning will be gauged with a pre and post-test, which also give the student's the opportunity for evaluation feedback. The pre-test will be compared to a post-test that is sent 1 week following the session, and then to a "final exam" that has questions from all sessions that is administered 60 days following the last session.

RESULTS:

We will use the results of the pre and post-tests to quantitatively analyze student's understandings of main concepts, and how their understanding is impacted following attending a HYPES session.

CONCLUSION:

First aid training is vital and includes important life-saving skills and knowledge that pre-clinical medical students may not possess. Students that participate in these sessions will be engaged in key clinical skills and gain knowledge, attitudes, and experience that will be valuable in their pre-clinical and clinical years. Our goal in this regional program is to show proof of concept that first aid training is integral part of medical education and can be delivered in a variety of formats.



Understanding and Addressing Women's Health and Mental Health Disparities in Correctional Facilities

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Arthur Orchanian, Angelina Palacios, Katherine Palmer Loveluck, Aaron Orellana, Anointing Onuoha, Adam Olszewski

PROBLEM STATEMENT:

Education regarding health disparities that exist in the criminal justice system is not commonplace among most medical school curricula, so this initiative aimed to explore how students can become educated about these disparities through a group project. With this understanding of how the social determinants of health affects patient populations, students can feel empowered to address said disparities and shape future clinical practices.

METHODS:

Students conducted a literature and digital media search on women's health and mental health in correctional facilities to identify disparities, examine how health system and policy factors contribute to said disparities, and develop potential interventions to improve outcomes pertaining to these patient populations. The information and strategies were incorporated into a Google Slides presentation and presented before faculty.

RESULTS:

Disparities that were identified regarding women in the criminal justice system include high rates of substance abuse, a lack of proper STI screening, and a lack of proper prenatal care for pregnant inmates. Disparities that were identified regarding mental health in the criminal justice system include high rates of substance abuse, disproportionate imprisonment of those with untreated mental illnesses, and a lack of standardized mental health care in correctional facilities. Factors that were identified as contributing to these disparities include the criminalization of drug use, stigmas surrounding providing healthcare to inmates, high costs of health care, and more. Strategies for addressing these disparities that were conceived include legislation to increase standards of care in correctional facilities, screening tools for clinicians to utilize in outpatient settings for previously incarcerated patients, and increasing access to preventative care and mental health treatment.

CONCLUSION:

This initiative educated medical students on the existence of disparities in the criminal justice system regarding women and mental health. Students also developed their professionalism by finding avenues for addressing these disparities through their future practices and advocacy measures.





Faculty and Student Collaboration on Curriculum Changes to Improve Student Wellness

TYPE: Poster

CATEGORY: Innovation

AUTHORS: James MacKenzie, Elizabeth Jakubowski, Victoria Badia, Eva Waino M.D., Diane Levine M.D.

PROBLEM STATEMENT:

Medical school can be a time of significant distress for students nationwide. Though stress is multifactorial, curriculum decisions that are targeted to reduce student role conflict can be effective in maximizing learner wellness. Making curriculum changes that reflect the particular needs of a class requires a close working relationship among students and faculty.

METHODS:

The preclinical wellness taskforce composed of preclinical students, faculty from clinical and basic science departments, and administrative officials met biweekly over the course of several months. The group's goal was to make recommendations on policy changes that improve student satisfaction and reduce role stress associated with a variety of activities in the School of Medicine (SOM).

The taskforce focused primarily on interventions targeted to:

- a. Improve recognition of student achievements,
- b. Design curricular events that permit students to demonstrate their passions and abilities,
- c. Improve the organizational structure of the curriculum and of instructional weeks,
- d. Schedule courses and exams to account for learner wellness, and
- e. Provide grading policies and academic support that allow students to course correct ahead of the summative and board exams.

The taskforce then presented recommendations to a larger body of faculty and administrators working to improve curriculum at the SOM.

RESULTS:

Recommendations made by the taskforce included improved communication between administration and student body about required events, expanding a program to reward professionalism, developing a scholarly concentration program to allow students to explore other areas of interest, and offering consistent and predictable scheduling of required events each week. These recommendations are being incorporated into the curriculum for the class of 2024.

CONCLUSION:

Curricular changes made involving both student and faculty feedback can help all parties focus on change that is effective, efficient, and pertinent to gaps in the WSUSOM preclinical educational experience.

Getting Physical in a Socially Distant World: Sensitive Exam Workshop for Medical Students

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Alexandria Flessel, Katherine Hoopes, Medina Sareini, Christopher Guyer, M.D.

PROBLEM STATEMENT:

Training preclinical students in physical exam maneuvers of the breast and pelvis is difficult; the COVID-19 pandemic has added challenges with Standardized Patients (SPs) reluctant to encounter students or prohibited from returning to work. Preceptors also have difficulty guiding students due to the sensitive nature of the structures being examined. Simulations cannot replace hands-on experience, however students can gain familiarity and confidence prior to performing exams during real-world encounters. A simulation curriculum was designed for preclinical medical students to learn breast and female genitourinary physical exam skills. Students were surveyed on their confidence performing breast and pelvic exams before and after participating in the workshop, as well as their satisfaction with the workshop.

METHODS:

A facilitator led small group workshops to teach second year medical students breast and pelvic exam skills using simulation mannequins, pap smears, cervical culture, wet mount and potassium hydroxide preparation. 30 minute sessions were held over three days to accommodate 280 students. Sessions were facilitated by faculty, chief residents and fourth year medical students. Sessions allowed for hands-on practice, case studies and slide review to discuss pathology. All participating students were surveyed following the workshop.

RESULTS:

105 unique responses were collected. 70% of students reported not being comfortable performing these exams prior to the workshop. Following the workshop 90% of students reported feeling more confident performing breast and pelvic exams. 89% of students were satisfied with the workshop.

CONCLUSION:

Simulation based practice offers preclinical students the benefit of comfort and familiarity before performing maneuvers on actual patients. The use of mannequins in place of SPs is especially useful in a socially distanced world. Preclinical students were successful in utilizing this method of training at our institution.



Impact of Incorporating Medications for Addiction Treatment (MAT) Waiver Training during Undergraduate Medical Clerkship Curriculum

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Kaycee Ching, Katherine Loveluck, Tabitha E. Moses, Michael Garmo, Rafael Ramos, Eva Waino, M.D., Diane Levine, M.D.

PROBLEM STATEMENT:

The opioid epidemic in the US is a major concern in healthcare. In 2018, 21.2 million people aged 12 or older needed treatment for a substance use disorder (SUD), yet only 18% actually received treatment. Most primary care physicians self-report lacking the skills to identify and appropriately treat SUDs.

Medical schools now deliver education on Medications for Addiction Treatment (MAT), yet there is a paucity of literature on its impact. The aim of our study is to determine how MAT training during medical school on students' recommendations for management of patients with SUD.

METHODS:

A preliminary study (n=266) revealed the positive impact of MAT-waiver training on WSUSOM students' competence and confidence with MAT, opioid use disorder, and patients with SUDs; as a result, MAT-waiver training is now a required component of the third year curriculum. Follow-up surveys will be sent to all clerkship students. Surveys will focus on the students' experiences in recommending MAT to their preceptors and attending faculty as a plan of care option, and the subsequent receptivity of the care team. Specifically, we will determine if MAT was initiated. Questions will address how many times students thought MAT was warranted and recommended it, most common rotations for recommendations, which clinical team members they spoke to, team responses, and if recommendations led to the start of MAT.

RESULTS:

The primary outcome of this study will be the number of times students recommended MAT training and which rotations recommendations occurred. Secondary outcomes will be the receptivity of the care team to these recommendations and whether the patient was started on MAT.

CONCLUSION:

MAT education is effective in changing attitudes of third year medical students. This study will determine the impact of training on treatment recommendations of patients cared for by students during the latter half of their medical education.



Incorporating Spiritual Assessments Training into the P4 Curriculum for Pre-Clerkship Students

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Gabrielle Barthel, Dr. Ralph Williams, and Dr. Nakia Allen

PROBLEM STATEMENT:

The vast majority of U.S. adults believe spiritual health is critical to personal well-being. Most patients want their physicians to address their spiritual needs, but physician surveys have identified lack of training in spiritual assessments as a major barrier to addressing patient spirituality in a medical setting. In response, a Spirituality in Medicine Panel with simulated patient cases will be added to the first year (M1) P4 curriculum.

METHODS:

The M1 P4 Curriculum at WSU SOM will be hosting a Spirituality in Medicine Panel event on December 3, 2020. This three hour session will include a panel and small group breakout sessions. Dr. Stephen King's Spirituality in Medicine lecture from the AAMC MedEdPORTAL will be incorporated to teach spirituality's impact on health and the means of addressing spiritual concerns with patients. In small groups, simulated patient cases will be used to demonstrate the utility of spiritual assessments. Healthcare providers and clergy from Christian, Jewish, Islamic, and other religious backgrounds will serve as panel members and group facilitators. To assess student knowledge of and preparedness in addressing patients' spiritual needs, pre- and post-surveys will be distributed to the attendees. Survey questions will assess competencies identified by the National Initiative to Develop Competencies in Spirituality for Medical Education (NIDCSME).

RESULTS:

Following the Spirituality in Medicine Panel, pre- and post-event student surveys will be assessed to determine if the event brought students closer to meeting the competencies outlined by the NIDCSME, enhanced their understanding of the role of spirituality in medicine, and increased their comfort level in discussing spirituality with patients.

CONCLUSION:

Addressing patients' spirituality could improve health outcomes, but most physicians feel under prepared to address this topic. Introducing a Spirituality in Medicine Panel to the P4 curriculum addresses this gap in medical education and will equip future physicians to better serve their patients.





Establishing a Quality Assurance Process for Emergency Ultrasound Fostering Medical Education and Trainee Involvement

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Emily Irvin, M.D.

PROBLEM STATEMENT:

The use of emergency ultrasonography (EUS) within emergency medicine (EM) and EM resident training has expanded greatly over several decades. EUS now exists as standard of care for several EM procedures and is critical for decision-making. Specific need exists for oversight of EM physician and resident credentialing, billing, and quality assurance (QA) as many departments now seek reimbursement for EUS completed in the department. The EUS division at Henry Ford Hospital seeks to expand the QA program for EUS and uniquely incorporate resident and medical student education into the process. The objective for the innovation project is to develop a new QA program for EUS in tandem with establishing a complimentary educational curriculum to include medical students and resident education. This innovative project allows for significant collaboration between EUS faculty and residents, and establishes trainee exposure within the unique process of QA.

METHODS:

Utilize software including QpathE (EUS storage) and REDCap (secure web application for data) to streamline data storage and case review. Monthly QA meetings held with trainees and faculty, followed by in-depth discussion with faculty about improved methods for implementation of data storage, resident involvement and process. Feedback collected from residents, medical students and faculty for strengths, weaknesses and opportunities for QA process. This data will be analyzed and incorporated into improvement plan.

RESULTS:

Valuation plan includes quarterly evaluation of QA process with major stakeholders (EUS director, fellow, faculty). A quality improvement plan will be created and objectives established to incorporate robust teaching into meetings for trainees and improving data storage through software.

CONCLUSION:

EUS programs include billing, credentialing and education of trainees and providers. An innovative approach to a necessary QA process model that incorporates trainees can expand robust offerings for education and be implemented within other institutions.



Reducing Health Disparities in Skin of Color Patients: An Educational Quality Improvement

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Kathren Shango, Fouad Abdole, Sarah Gonzalez, Meena Moossavi, M.D., MPH

PROBLEM STATEMENT:

Pre-clinical medical student education in dermatology should include equal representation of skin of color. Medical students receive very little education regarding differences in presentation of skin diseases in people of darker skin tones. Dermatology itself is not emphasized in American medical schools. A voluntary supplemental online module, titled Skin of Color was implemented as part of the second-year dermatology curriculum at Wayne State School of Medicine (WSU) in Detroit, Michigan. The goal of the module was to ascertain whether or not it may increase confidence in students with their approach to diagnosing diseases in darker skin tones.

METHODS:

77 of 295 students (26%) completed a Skin of Color optional module consisting of thirteen cases of common skin diseases in darker skin tones. A pre and post survey assessing students confidence. Confidence was assessed using a five-point Likert scale. Data was collected using an anonymous login ID that was unique to each student. A paired t-test was used to determine if a significant increase in confidence occurred after completion of the module.

RESULTS:

After completing the module, medical students demonstrated a statistically significant increase in confidence in diagnosing skin diseases in darker skin tones.

CONCLUSION:

Several students pointed out that the current curriculum needed more representation of darker skin diseases as most of the images were of caucasian skin types. Course directors should consider using this as a framework to develop materials to increase the confidence of the medical student in approaching the diverse dermatology patient.





Exploring Global Public Health And Social Determinants of Health Through An Interdisciplinary Approach

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Julie Gleason-Comstock, Ph.D., MCHES; Vijaya Arun Kumar, M.D., MPH; Tsveti Markova, M.D., FAAP; Juliann Binienda, Ph.D.

PROBLEM STATEMENT:

Global health is acknowledged as an interdisciplinary approach for addressing social determinants of health (SDOH) and health equity. In 2019, the Wayne State University (WSU) Department of Family Medicine & Public Health Sciences offered a new hybrid didactic graduate course in global public health which examined how SDOH can be applied to the World Health Organization (WHO) 2030 Sustainable Development Goals. The class was innovative in that students were mentored by the instructor to expand their global health perspectives by submitting abstracts on their chosen class topic to a University peer-reviewed research conference.

METHODS:

The thirteen week elective graduate course was available to public health, medical and allied health students. A textbook provided online knowledge and quiz content. Global health experts participated in an online panel and led small group sessions. The culminating student project was a Symposium poster presentation in which the instructor assigned students to WHO global areas. Students could choose which SDG to address through the framework of SDOH key areas shared by WHO and Healthy People 2020. Evaluation was conducted through the WSU Student Evaluation of Teaching method

RESULTS:

The fifteen enrolled students generally reported strong satisfaction with course participation and relevance. In the Symposium paradigm, each SDG was intersected by at least one SDOH topic.

CONCLUSION:

Five mentored students successfully submitted abstracts for peer-reviewed published posters at the 2019 WSU Division of Research Global Health, Justice and the Environment Conference. This interdisciplinary approach holds potential for incorporating components of global public health and SDOH into medical and graduate school curricula.



Real-time Health and Wellness Check-In System for Medical Student Wellness at Wayne State University School of Medicine (WSUSOM)

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Julie Fynke, M.P.H., Marla Krasnick, Gurbani Bedi, Eva Waineo, M.D.

PROBLEM STATEMENT:

Studies have shown medical students have a higher prevalence of anxiety and depression than age-matched peers and up to 11% admitted to suicidal thoughts in the past year (1). Help-seeking behavior is often avoided due to perceived norms which dictate that having a mental health problem can be viewed as a weakness or can lead to decreased success in their career (2). A virtual wellness check-in system was implemented to minimize the stigma around help-seeking and to better understand and improve student mental health and wellbeing.

METHODS:

WSUSOM collaborated with Early Alert, which sends a one-question text message to students, asking them to rate one of eight facets of wellness. These include mood, sleep, cognition, academic, physical, relational, financial, and life satisfaction. Students can elect to respond with a 1-10 number. Early Alert then asks students who responded with a low rating if they are interested in resources. If the student agrees, relevant resources are sent by text. Support resources are both local and national, and reviewed by students, counselors, faculty, and administration at WSUSOM.

RESULTS:

A text message from early alert has been sent once a week to all medical students enrolled in this program. Individual student answers remain confidential and aggregate results are shared. During the past 5 months, between 364-491 students received a text message every week and between 215-426 students replied. The facets of wellness noted to have the greatest percent of distressed responses by students are sleep (21%) and mood (18.5%), while those with the lowest percent are physical (7.3%) and financial (8%).

CONCLUSION:

Frequent check-ins on student wellness are crucial for identifying facets of wellness for which we can further support students. By understanding our students' specific needs, medical schools can better tailor health and wellness programming, provide just-in-time resources, and create a more positive learning environment.





Professional Coaching in Residency: The Analysis of a Novel Approach Decreasing Resident Burnout

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Matthew Silbergleit B.S., Shibandri Das M.D., Mark S. Juzych M.D. MHSA, and Pradeepa Yoganathan M.D., M.Sc.

PROBLEM STATEMENT:

Burnout is a well-documented stressor in medicine. A recent study in 2018 found that 55.8% of ophthalmology residents displayed symptoms of burnout. Burnout has been shown to significantly increase unprofessional conduct and medical errors. However, there is varied effectiveness and limited data regarding current self-care interventions addressing burnout. Simply put, we have yet to find one cure for this pervasive phenomenon in medicine. A recent and promising model to tackle burnout in the medical field is coaching. The Harvard Business Review and American Medical Association have demonstrated the importance of coaching and its positive effects on professional performance and well-being. Our goal is to implement and analyze an organizational level coaching program for ophthalmology residents at Kresge Eye Institute as the front line method for prevention and management of physician burnout.

METHODS:

We plan on utilizing the six step Kern Method to develop a resident wellness curriculum addressing resident burnout. This curriculum will focus on implementation of professional coaching and we will evaluate the success of this program after 6 months and 1 year of implementation through survey data.

RESULTS:

The effectiveness of professional coaching as a new addition to the ophthalmology curriculum at Kresge Eye Institute will largely be judged by the Kirkpatrick Pyramid for program evaluation. The goal will be to teach vocabulary, and provide not only knowledge but the tools needed to tackle burnout. We will measure the residents' ability to adapt these tools into their education through surveys grading the effectiveness of our coaching curriculum in all stages of the Kirkpatrick Pyramid.

CONCLUSION:

Prior research demonstrates that the stigma of depression impacts a physician's ability to seek help regarding physician burnout. We expect to find that our program will have increased resident participation as coaching is a professional benefit unaffected by a mental health stigma. Limitations will include the residents own schedule allowing time to meet with their coach. We hope to limit this with the flexibility of virtual meetings/calls. Providing coaching from our organization for our residents will be a unique opportunity to decrease burnout, improve quality of life, and may become a new model for residency training throughout the country.



Implementation of an Ophthalmology Focused Quality Improvement (QI) Curriculum at Kresge Eye Institute

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Shibandri Das M.D., Matthew Silbergleit B.S., Mark S. Juzych M.D. MHSA, and Pradeepa Yoganathan M.D., M.Sc.

PROBLEM STATEMENT:

As part of the 2020 ACGME guidelines for resident education in ophthalmology, residents must demonstrate competence in systematically analyzing practice using quality improvement methods, and implementing changes with a goal of practice improvement. Evidence from the implementation of such programs in other departments have shown that to successfully implement quality improvement (QI) projects in residency programs, these techniques must be formally taught, and opportunities for resident participation must be multiple and diverse with the ability for residents to benefit from the QI outcomes. We have developed and are implementing our first QI curriculum at Kresge Eye Institute which we hope will accomplish this goal.

METHODS:

Kresge Eye Institute residents were split up into seven teams of three residents per team, with one resident from each year per team. Each of these teams will develop, analyze, and implement one QI initiative for the 2020-2021 academic year. In addition to faculty advisor access, teams will be provided protected time in their schedule to implement their projects. An April 2021 QI summit will serve as a platform for teams to present a summary of lessons learned and an effectiveness analysis of their initiatives.

RESULTS:

The effectiveness of this new addition to the ophthalmology curriculum at the Kresge Eye Institute will largely be judged by the validated Kirkpatrick Pyramid for program evaluation. This will include end of the year surveys on resident satisfaction and lessons learned as a result of the new program. The impact of this new curriculum will be judged based on the results of the resident team's individual QI initiatives and residents' ability to apply skills learned from this new curriculum.

CONCLUSION:

The residents QI initiative results will be disseminated throughout the ophthalmology program via a QI summit in April 2021. Resident feedback will be elicited throughout the duration of this pilot curriculum to address any limitations encountered while undertaking their initiatives. We expect that this curriculum will become a vital aspect of ophthalmology resident education moving forward, and plan to incorporate all feedback into consideration when determining how to modify this curriculum for the future.





Virtual Student and Faculty Run Initiatives that Support Medical Student Wellness at Wayne State University School of Medicine

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Marla Krasnick, Gurbani Bedi, Eva Waineo

PROBLEM STATEMENT:

Studies of North American medical students show a higher prevalence of anxiety and depression than age-matched peers. LCME guidelines call for programs to promote [student] well-being and to facilitate their adjustment to the physical and emotional demands of medical education. A recent study also found that medical students are experiencing increased anxiety due to the COVID-19 disruption, yet are less likely to seek support. Programming at WSUSOM pivoted to virtual student and faculty-run initiatives developed to prioritize student wellness during the pandemic and beyond. To date, there is little data on effects of virtual wellness initiatives. We plan to survey students to understand their impact.

METHODS:

Our virtual wellness initiatives were targeted to all 1200 medical students and can be divided into three categories:

1. Optional initiatives held live over Zoom,
2. Mandatory curriculum held live over Zoom
3. Ongoing initiatives held on social media platforms.

Optional initiatives on Zoom consisted of students who signed up for initiatives of their choice. Mandatory curriculum includes large group wellness-focused panels for 300 students. Ongoing initiatives held on social media included a meditation challenge via WhatsApp Messenger and wellness challenges via Instagram.

RESULTS:

We will continue to track the number of sessions offered and plan to assess student feedback following each event. Student feedback of all curriculum events will continue to be analyzed. Impact on wellness will be also assessed through our bi-annual survey of all students at WSUSOM. If proven impactful, we will adapt our initiatives for long-term sustainability and integration into the wellness curriculum.

CONCLUSION:

Supporting future physicians' wellness is vital because of its impact on physician health and patient care. Understanding which virtual initiatives foster a sense of community can help medical schools create a positive environment for students, especially during times of increased stress and isolation.

COVID-19 impact on health and social disparities experienced by low-income woman in Detroit

TYPE: Poster

CATEGORY: Innovation

AUTHORS: Mindy M. Kim, Caleb Sokolowski, Neethi Sriranga

PROBLEM STATEMENT:

During the ongoing SARS-CoV-2 (COVID-19) pandemic, patients in low-income communities are at risk for being overlooked as their regular streams of assistance may be disrupted. A case study was completed of a middle-aged African American woman with hypercholesterolemia in Detroit, Michigan. The patient experienced poverty and relied on social services such as food stamps and pantries for many of her daily needs. The purpose of this study is to investigate health disparities and shortcomings of the healthcare system experienced by a low-income at-risk woman in Detroit due to the COVID-19 pandemic.

METHODS:

A 14-question survey was conducted via phone on April 27, 2020 with a patient to assess how COVID-19 affected her daily life and access to resources. She was asked to compare her needs before and after COVID-19, and a list was compiled of shortcomings she experienced.

RESULTS:

Our patient faced a number of issues prior to COVID-19 that were exacerbated once the pandemic began. The patient was laid off from her DJ Personality job, lacked transportation, and was unable to meet with her physician. She struggled to pay for food and lack of transportation made it difficult for her to travel to a grocery store. The patient's physician canceled her appointment and she could not receive care for her high cholesterol. It became apparent that COVID-19 led her to lose essential resources, which had a compounding, deleterious effect on her well-being.

CONCLUSION:

There are many unmet needs in disadvantaged communities due to COVID-19. We developed a personalized resource guide to help alleviate our patients' troubles. We encourage physicians to be proactive about reaching out to their patients through telemedicine or online patient portals. The healthcare system has the ability to mitigate the needs in low income communities, and healthcare professionals should take the initiative to deliver a holistic approach to care.



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